REPEATER JOURNAL

CAROLINAS - VIRGINIA REPEATER ASSN. INC

AUGUST 1978 "IN OUR 7th YEAR" VOLUME 7, NO. 3

cvra REPEATERS VA NC SC

Organized 1971

- **COVER STORY . . . JUNE VHF-QSO PARTY**
- **EDITORIAL COMMENT HAMFEST — BIG BUSINESS**
- **CVRA ANNUAL MEET SKED SEPTEMBER**
- **UPDATED N.C., S.C., VA. REPEATER INDEX**

REPRESENTING VHF / UHF INTERESTS THROUGHOUT NORTH CAROLINA, SOUTH CAROLINA, & VIRGINIA

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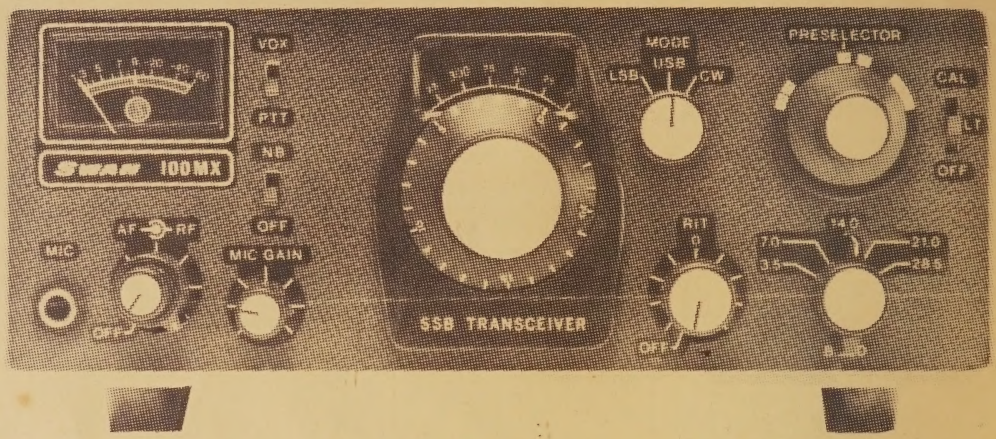
A member of the Cubic Corporation family of companies

100 MX TRANSCEIVER



100 MX MOBILE TRANSCEIVER

Built-in Noise Blanker and Vox. One Kc readout with permability tuned oscillator (PTO). RIT control ± kHz. Preselector for transmit and receive. Minimum 100 watts P.E.P. output, all bands.

SPECIFICATIONS

Frequency/Range — Standard
80 meters (3.5 — 4.0 MHz)
40 meters (7.0 — 7.5 MHz)
20 meters (14.0 — 14.5 MHz)
15 meters (21.0 — 21.5 MHz)
10 meters (28.5 — 29.0 MHz)

Extended Frequency Coverage
500 KHz segments of 10 meter band 28.0-28.5 29.0-29.5 29.5-30.0. By replacing standard crystal with optional crystal for desired segment. No realignment required.

Modes of Operation
USB, LSB, CW

I.F. Filter
9 mHz quartz crystal filter, 2.7 KHz bandwidth, 1.7:1 shape factor.

Calibrator
Built-in 25 KHz calibrator.

VOX
Built-in, standard.

Noise Blanker
Built-in, standard.

Mobile Mount
Included, standard.

RECEIVER SPECIFICATIONS

AGC
RF derived fast attack control decay with range in excess of 120db. From 1 uv to 3 v audio output remain within 5db.

Meter Reads
S units to 60db over S9.

Sensitivity
Less than 0.35 uv at 50 ohms for 10db signal plus noise-to-noise ratio ALL bands.

RF-Derived AGC
Fast attack, controlled decay guards against undesirable pumping action.

CW Sidetone
Monitors CW keying and includes independent level and pitch controls.

Audio Output
Four watts into four Ohm load. Provisions for external speaker or headphones on rear panel.

Audio Response
300 to 3000 Hz.

Weight: 13.0 pounds
Dimensions in inches: 3.75H, 11.60W, 9.75W.

TRANSMITTER SPECIFICATIONS

Power Output Rating
Minimum 100 W P.E.P. single sideband and CW ALL Bands @ 13.8 VDC nominal to 50 ohm resistive load.

Unwanted Sideband Suppression
Greater than 60 dB.

Carrier Suppression
Greater than 50 db.

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Triad Electronic Communications Company

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	9:00 to 5:30	9:00 to 1:00

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AUGUST 1978 "IN OUR 7th YEAR" VOLUME 7, NO. 3

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ON THE COVER

VHF-QSO Party atop Beech Mt. One of 3 towers used by the K4CAW group out of Greensboro. See story this journal.

EDITORIAL COMMENT

CVRA CAN BE A CVTWVAGDCRA . . . .

The CVRA, regardless of what any one person might think, is one of the most coordinated, well known, and best respected repeater councils in the United States.

It would seem obvious that neighboring States to the CVRA territory might desire to join us. This I fully support, with restrictions.

The restrictions being, any additional State that joins with the CVRA must be prepared to carry the burden of Frequency Allocations, Membership of Repeaters, Associate Memberships, and News.

If our CVRA Officers and Directors do agree to allow ANY state to join the CVRA, this consideration must be dealt with heavily. The logistics of centrally coordinating, gathering news, etc. has become a burden that a $50,000 a year man might grimace when faced with the task . . . we have people who do it for nothing, in their spare time.

A lot of people (outisde the N.C. area) complain about the centralization of

Continued on Page 44

Maybe A Hamvention In Colfax . . .

This editorial covers a sticky subject, and certainly won't make too many friends. But one of the few privileges of an editor, other than being able to read the book first, is to express HIS opinion on the editorial page. The opinion is mine, and does not necessarily represent the views of the CVRA or any of its members . . . but then again, it might represent the thoughts of a good many.

When will the deluge of Hamfests and Hamventions stop? They are happening in our territory everywhere, almost everyweekend from February through September, and now halfway through October.

Many established hamfests have decided, "if we can draw a certain number of people in one day — why not try to get twice as many in two days." So there they go.

Others have grown considerably over the years, and are now getting what is called the "2-day Hamvention". At this large place you can see Amateur equipment, CB's, TV's, Trucks, Firemen, National Guard, Police and you name it. The cost of renting these Civic Centers is staggering. The club sponsoring the

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NOTE TO CVRA JOURNAL ADVERTISERS

The CVRA Journal for November will be in the mail on time the first of the month. Normal deadline will be followed. If you are on contract, and want ad changes, we must have them NO LATER than Oct. 1. If we receive no changes for you by that date, we assume you want to repeat ads which ran in the August issue. With the logistics of putting the Journal together with such a small crew, we MUST abide by these deadlines and not allow any exceptions. Remember, November Journal Deadlines are OCTOBER 1st, no later!

-Ken Holliday, WA4DYY

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2 WAYNE → 'O' SHOULD BE DELETED

ROSS TO ASSUME DUTIES OF FREQUENCY COORDINATOR

Albert T. Ross, K4CAW of Greensboro has been named new CVRA Frequency Coordinator, according to Charles Durst, President of the CVRA.

"Al" as he is known to everyone, no stranger to the organization, held the purse strings for the CVRA for many years. He was relieved by Carl Smith, N4AA last year.

Ross is perhaps the best known amateur in the 3-State area. He is the "Granddaddy" of 2-meter FM. His strong voice and signal out of Greensboro has stretched from Canada to Florida over the past years.

Al succeeds Herman Cone III, WB4DBB, who requested Durst find a replacement for him, due to pressing personal committments.

"We are very fortunate that Al Ross agreed to take on the job of Frequency Coordinator," said Durst, "As more repeaters get on the air, the job of coordinating is becoming a tedius one, and what man will be more suited than Al."

Durst said Ross will take over full duties of coordinating with the various State Directors on September 1st.

"Until then, Herman and I will turn over the mountain of information we have involving coordinating, and help all we can to get Al ready to take over."

Ross told the Journal he was pleased to be offered the job of Frequency Coordinator — although he had quite a bit to learn before feeling he could do the job as it should be done.

"I believe in Communication," said Ross, "You've got to have communications channels open to these people who have requests, complaints or whatever — they need to know we care and are trying to help."

He said his biggest goal as coordinator will be to work closely with the three State Directors and establish strong lines of communications with the CVRA membership, and for prospective new repeater owners coming into the folds every day.

Durst said, "We must get strong leaders in key positions of the CVRA. We've grown too much and gone to far to let things slip — each key job in the CVRA is becoming more demanding each week. With over 230 repeaters in CVRA territory, we must stay ahead of the game."

"Herman with what little time available did a very good job," Durst said, "Al, being retired (from Western Electric) has more time to donate top the organization and we feel he can expand with the times — he's perfect for the job, we're very fortunate."

AUTOPATCH PROCEDURE

Many Auto-Patch equipped repeaters in the CVRA territory have published procedures for using their auto-patch. Check with your particular group to see that you follow procedure correctly. Sometimes things required may seem trivial to you, but some use tape recorders that only start when the "star" or "asterisk" is pressed. In a legal sense, it is required that you call up the repeater, announcing desire for an autopatch call, make the call, and identify yourself, the repeater, and the person to whom you spoke with on the repeater.

Finally, don't abuse your auto-patch. Is the call really necessary? There are lots of people listening to you. Don't be commercial, and keep the call short.

1978 SHELBY

SEPTEMBER 2ND AND 3RD

AT BEAUTIFUL CEDAR PARK – 15 MILES NORTH OF SHELBY, NC (NC No. 10 See Map)

FULL REGISTRATION (INCLUDING MEAL) $7.00
REGISTRATION ONLY (WITHOUT MEAL) $3.00
CAMPING (PER NIGHT) $4.00

REGISTRATION WILL BEGIN ABOUT 9:30 A.M.

(TAILGATERS ARE ASKED TO PLEASE REGISTER UPON ARRIVAL)

PRIZES!

PRIZES!

Due to GROWTH of Hamfest, all non-traders and non-campers are requested to park across the road from Cedar Park.

Some of the motels in the area are listed below. They advise calling well in advance as their weekend business is good and reservations may be a problem.

SHELBY –
Holiday Inn, Governors Inn, Hagers.

KINGS MOUNTAIN –
Royal Villa.

GASTONIA –
Mid-town, Holiday Inn, Howard Johnson, Scottish Inns.

GAFFNEY –
Holiday Inn.

FOREST CITY –
Gardo's, Isothermal, Goode's.

LINCOLNTON –
Town & Country

HICKORY –
Howard Johnson, Holiday Inn, Mull's, Ramada Inn.

TALK-IN FREQUENCIES

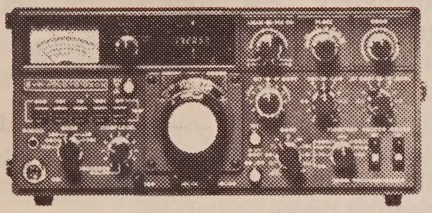
146.28-146.88	146.52-146.52
146.94-146.94	3.923

HAMFEST

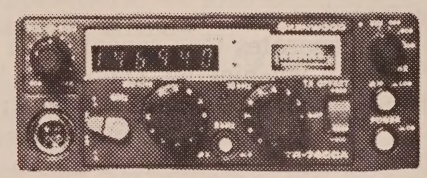
SATURDAY, SUNDAY

"The Best In The Southeast"

KENWOOD TS-820
GRAND PRIZE!



SECOND PRIZE
KENWOOD TR-7400A



YOU DO NOT HAVE TO BE PRESENT TO WIN THE MAIN PRIZES

PLUS MANY MORE!

NO MEMBER OF THE SHELBY RADIO CLUB OR ANY MEMBER OF THEIR FAMILY IS ELIGIBLE TO WIN ANY PRIZE.

GOOD FOOD!!! Delicious Southern Fried Chicken and Fresh Pit Cooked Barbecue With All The Trimmings **ALL YOU CAN EAT!!!**

Tailgaters are requested to Register on Arrival. All food will be prepared on the premises by Cedar Park. Sunday School at 10:00 A.M. Sunday. Playground for children - Free Bingo for the family - Trailer and Camping available ($4.00/night) - Plenty of shelter in the event of rain. Many items of new equipment on display - Plenty of trading and swapping - Special table reserved for the "Southern Coffee Club" - Annual meeting of the CVRA will be held Saturday night at Governors Inn - Listen for announcements.

NORTHERN VIRGINIA FM ASSN. JOINS CVRA AS FULL MEMBER

The CVRA Journal extends a warm welcome to our Northern Virginia friends who have officially joined the CVRA as full members. The Northern Virginia FM Association.

The Club is an organization of nearly 700 members, governed by a Board of Directors made up of 7 members elected from and by the general membership. The officers of the Association are then elected by the Board.

NVFMA operates four repeaters in the metropolitan Washington, D.C. area. The primary machine 31-91 operates from Tyson's Corner, giving 100 mile coverage in all directions. The machine also has a remote receiver in downtown Washington, D.C. The K4VYN/4 machine has a private autopatch for members only.

The secondary 2-meter repeater WR4AAD operates on 19-79 at the Fairfax County Government Center in Fairfax. The machine covers northern counties in Virginia, the D.C. area and southern counties in Maryland.

Also at the Tyson's Corner site is a 220 mhz repeater, 222.34-223.94 operating under the call of K4GCM/R The 24-hour repeater gives consistent mobile coverage in a 10 county circle in Northern Virginia, Washington and Maryland.

A 450 mhz repeater is also located at Tyson's. Operating on 444.75-449.75, WR4ABR is linked with the K4GCM 220 repeater. Coverage is very similar to the 220 repeater.

Thomas Gooding is president of the club. Again welcome to the CVRA. We hope to see many of your club members joining the CVRA as Associate Members and receiving the Journal by next issue in November. (editor)

ANNUAL CVRA MEETING TO BE HELD IN SHELBY SEPT. 2

Charles Durst, WA4WTX, president of the CVRA announces the annual CVRA meeting will be held Saturday night, September 2, during the Shelby hamfest. The meeting will probably be at the Governors Inn in Shelby.

Several other group meetings with CVRA officers and repeater groups will also be planned throughout the weekend at the hamfest. Any repeater groups wishing a meeting should contact Durst Immediately. His address appears on Page 2 of the Journal.

Repeater owners, members or not, associate members of the CVRA and interested hams are invited to attend the meeting. Announcements will be made during the day Saturday at the hamfest as to meeting times and places.

THANKS TO THE CLUBS

The CVRA thanks the many Hamfest clubs who generously donated space free of charge at their Hamfests, and promoted membership on their PA systems. The CVRA officers and committees who attended the hamfests and manned the booths at their own expense also express their thanks for your assistance. The ARRL booth and especially Phil Wicker, W4ACY, Roanoke Division Director has also been most helpful in promoting the CVRA.

Again thanks for your help. We like to work for you, when you help us.

120 STRONG AND GROWING

The CVRA now represents more than 120 repeater groups in both Carolinas, Virginia, Tennessee, West Virginia, Georgia and D.C. This is over 60% of all repeater groups in the 3-state area.

WE HAD TO MAKE SOME CHANGES FOR THE BETTER

(by Wayne C. Williams, Editor)

Have you ever been so proud of something and bursting at the seams only to see it dashed to pieces before your very eyes.

This is about what we saw with the May Journal. You realized something was wrong as time passed, May ended and June passed and still no May Journal. We were 6 weeks to be exact, late.

We have seen the Journal grow from 24 pages, 1,000 copies to the May, 68 page, 3,500 copy book in less than a year. What happened, we got caught with our own success.

For 7 years, dedicated printer friends have worked hard to print the Journal for you and get it to Lindsay, W4IZI for mailing. These printers, who are in business to make money, generally printed the Journal at their cost. This low price of course kept expenses such that with a little advertising, the $2 membership dues of Associate Membership was able to cover the modest losses of the Journal, i.e. the cost of publishing the Journal above the revenue obtained by advertising. But growth in membership required more Journals be published. More advertisers at a rate not realistic with the cost of the book, causes larger books . . . so there we went. The larger we got and more members we got, the more in the hole we went.

By now our printer friends had a tiger by the tail. The huge book, with so many copies was just too much for a small shop to handle and complete in two weeks.

The May issue went further with other problems which we won't go into, but all these things added to the lateness of the May Journal. With agreement of the ham printer friend, we turned elsewhere to get printing and typesetting.

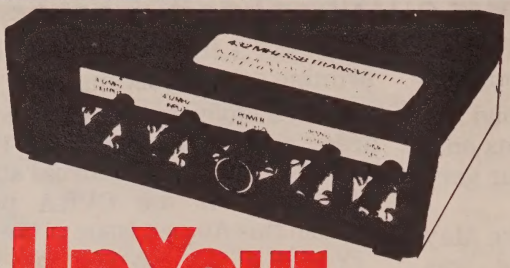
Several quotes were obtained around the area, and Golden Triangle Printing Co. was selected by the Journal staff with the agreement of the CVRA president to publish this August issue of the Journal.

Yes it is late too, but this time it was planned that way. We didn't want to get another issue of the Journal out so close to the late May issue. With new printers and typesetters, we also built in some extra time for unknowns.

So far, Golden Triangle has cooperated fully with us, and we feel they will be an asset to the Journal and the CVRA. We obviously will have some trouble spots to correct, but in the long run, we now have a printer who can handle a 100 page Journal and 10,000 copies if we ever get to that point with the ease of this issue and about the same time requirements for delivery.

With good also comes bad news. The Journal cost will rise, but steps will be taken in the future for additional revenue to keep us healthy in years to come.

We feel the Journal is the single most import facet of the CVRA, it must be maintained to keep communications channels open to the far reaching areas of the territory. No cost would be too great to maintain this. But we still are healthy, a bigger printer charges more, but not that much more, since automated equipment, computorized typesetting, and large quality presses are used. One thing for sure, in the end, we'll come out to the good, maintaining the quality product you demand, and best of all on time. The Journal has gone too far now to fall back just because we've outgrown the small printer. We must move forward and grow with the CVRA, and with Amateur Radio as a whole.



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THE CBer's DREAM . . . OR I TOUCHED A REAL HAM

(Editors Note: In the absence of Mike, WA4JIY not having a nifty story for us this issue. We offer the following reprint from the WAFAR Bulletin, by WB9KFS.)

Some years ago when I was a carefree CBer, I witnessed something that I will remember always . . . I think I'll tell you about it now:

For those who are unaware (and I can't imagine anyone), the eleven meter band seldom, if ever, is witness to a legal call. Power is illegal, antenna heights are illegal and the call signs . . . well, they something like this . . . Black Angus, Hot Rod, Five Fingers, Big Foot, Operator, Buckwheat, Ski King, Junk Man . . . the list is endless!

Now enter the ham. Let's see . . . what shall we name him . . . something common . . . say like Ira . . . "Ira the ham!" Good old Ira . . . lotta people named Ira.

Well, back to the story. Ira liked to let CBers know that he was a ham . . . not on the air, even though he occasionally lowered himself to talk to them on their own terms on 11-meters, in fact before he got his license, he was one of the "Super-Ops" on CB. When he met CBers in person he would lay his famous death dealing line on them . . . "I'M A HAM!"

This combination of three little words would bring vast "oooos" and "ahhhs" from the CBers. The reason for their reaction was one Ira had discovered and delighted in . . . all CBers really want to be Hams but just don't have the guts to study for the test! This then makes the Ham (Which they seldom come in contact with) somewhat of an idol. Ira knew this as well!

I remember the time I met "Ira the Ham" at another CBer's home, I remember it well. It was a hot summer evening and the 11-meter band was full of "Hey you guys . . . a ham's gonna be over at Buckwheat's tonight!"

"Oh . . . Wow! A real Ham???"

"Yup, a real Ham . . . he's really gonna be there!"

I must admit that I wanted to see what a real live Ham looked like enough to drive to Buckwheat's house that hot night. I sorta stayed in the background and observed so the Ham wouldn't recognize me.

Our friend, "Ira the Ham" arrived in a car bedecked with strange antennas mounted all over it. The CBers quickly gathered around him with bugged eyes. They watched breathlessly as he slowly and deliberately lit his pipe (All Hams smoke pipes) Then he muttered, (All Hams mutter) "CAPACITOR" and the CBers mumbled "Yeh . . . He's a Ham . . . Yeh!" He sure is.

Then after he drew long on his pipe, he mumbled (All Hams mumble too) to the gathered ears "3 HENRY CHOKE".

This caused the CBers mumblings (CBers try to imitate Hams, but don't quite make it) to increase to "Oh yea man . . . that's a Ham . . . Did you hear that . . . He said something about a Henry Choke? . . . He's a real live Ham for sure!"

Now "Ira the Ham" got into the deep stuff when he said, just barely loud enough for all to hear as he blew smoke rings (all Hams know how to blow smoke rings), "FULL BRIDGE RECEIVER"!

Now the CBers were gasping, rolling on the ground, jumping with glee . . . "Yeh! Yeh! I touched him! He's a Ham! Wow . . . Wow . . . Wow!" At this juncture, I noted several of the CBers crossing their legs to keep from doing what this was causing them to want to do! All in all, it was a heart rending sight to be sure.

Then as quickly as he had arrived, "Ira

Continued on Page 11

WILLIAMS RADIO SALES

THE IC-22S WAS SOMETHING . . .
THE NEW IC-280 IS SOMETHING ELSE!

Ask About It—Price It! You'll Be Pleasantly Surprised.

ICOM

IC-280, the Remotable 2meter Mobile

This microprocessor controlled unit provides memory and synthesis requirements for the most critical FM operator. The PLL control is located in the detachable front section of the radio, providing memory and frequency control for the main section, which is remotely mountable with an optional three meter, twenty-four conductor cable. With the use of the microprocessor, the **IC-280** can store three frequencies of your choice which are selected by a four position front panel switch. These frequencies are retained for as long as power is applied to the radio. Even when power is turned off at the front panel switch, the **IC-280** retains its memories. When power is completely removed from the radio the ± 600 KHz splits are still maintained.

Power is selectable high and low, with the low power level preset by an internal control. This internal control allows the low power to be anything from zero up to and including the full power output.

Frequency coverage of the **IC-280** is in excess of the 2 meter band, and the new band plan can easily be accommodated since it was included in the initial planning by the **IC-280** design team.

The main section of the **IC-280** uses the latest innovations in large signal handling FET front ends to provide excellent intermodulation character and good sensitivity at the same time. The IF filters are crystal monolithics in the first IF and ceramic in the second, providing narrow band capacity for today and tomorrow's crowded operating conditions Modular PA construction with broad band tuning provides full rated power across the full 2 meter band (plus a little).

Bright, easy to read, large LED's and a new style meter grace the brushed aluminum "new look" front panel, and since the front of the **IC-280** is a separate control head, it is now possible to mount this radio in those small cars and tight spaces and to put the main unit out of sight and out of mind.

ORDER TODAY!
WE CAN SHIP ANYWHERE!

IC-280 Specifications: ☐ Frequency Coverage: 143.90—148.11 MHz ☐ Operating Conditions: Temperature: −10°C to 60°C (14°F to 140°F), Duty Factor: continuous ☐ Frequency Stability: ±1.5 KHz ☐ Modulation Type: FM (F3) ☐ Antenna Impedance: 50 ohms unbalanced ☐ Power Requirement: DC 13.8V ±15% (negative ground) ☐ Current Drain: Transmitting: 2.5A Hi (10W), 1.2A Lo (1W), Receiving: 0.630A at max audio output, 0.450 at SQL ON with no signal ☐ Size: 58mm(h) x 156mm(w) x 228mm(d) ☐ Weight: approx. 2.2 Kg ☐ Power Output: 10W Hi, 1W Lo ☐ Modulation System: Phase ☐ Max. Frequency Deviation: ±5 KHz ☐ Spurious Output: more than 60 dB below carrier ☐ Microphone Impedance: 600 ohms dynamic or electret condenser type, such as the SM-2 ☐ Receiving System: Double superheterdyne ☐ Intermediate Frequency: 1st: 10.695 MHz, 2nd: 455 KHz ☐ Sensitivity: 1 uv at S+N/N at 30 dB or better, Noise suppression sensitivity 20 dB, 0.6 uv or less ☐ Selectivity: less tnan ±7.5 KHz at −6 dB, less than ±15 KHz at −60 dB ☐ Audio Output: More than 1.5W ☐ Audio Output Impedance: 8 ohms

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THE SHELBY HAMFEST, THE ONE WE WAIT FOR!

Last year the Vans, Campers came early. Some Thursday afternoon looking for a ideal place to park in the shady rolling slopes of Cedar Park, North of Shelby. By Friday night, the place looked like a Fiddler's Convention crowd, ready for the big event to start anytime. On Saturday morning, crowds lined the roads, campers, cars, motorcycles, vans, trucks, dealers, tailgaters, buyers, sellers, swappers and families.

The annual "granddaddy of them all" Shelby Hamfest begins officially Saturday morning, September 2 and continues through the afternoon of Sunday. Thousands of Amateurs and their families will converge on the Cedar Park meadow throughout the weekend. How many thousand, no one has ever been able to count. Registrations total over 5,000, but obviously many choose not to register everyone in the family.

Hundreds of dealers, tailgaters and sellers vie for choice spots to set up. By Saturday mid-morning, the festivities are in full swing. The aroma of coffee, food, and green pine trees drift over the field as thousands look, bargain, sell, swap, cuss and discuss equipment.

One often wonders why is Shelby so popular? Is it the reputation? Why do people save up their time, vacations, trips, for Shelby? Perhaps the main reason is the grass-roots idea of the Shelby Hamfest. It hasn't changed much over the past years, just gets bigger and bigger. About the only nuisence about the whole thing is the plumbing, but that gets a little better each year. At Shelby we have a big park, partial grass, some dust, lots of trees, and hot as blue blazes. We have hundreds of people selling and trading equipment from their own makeshift booths, tables, and stands. Its so big, you can't see it all in one day. It's so hot, you can't keep going continuously in the sun for long. But the excitement is there. It's the very thing you think of when you think HAMFEST - open park, crowds, dust, grass. There are no fancy air conditioned buildings and velvet decorated expensive booths, no guards at the door to stop you and require money for a paper badge that won't fit your pocket and render your plastic call plate you bought last year useless.

The meals, cooked on the premises are known far and wide, the barbecue will never be forgotten. It's never known if the Shelby club makes any money at all. I don't imagine they care too much. One thing is for certain, they have everything going for them and have had for years. The simplicity of the whole thing, and low cost to participants is the secret of success. (Editor)

THE CBer's DREAM . . .

Continued from Page 9

the Ham" was back in his antenna bedecked car and as he pulled away he leaned out of the window and called back to the CBers "DIODE . . . NPN TRANSISTOR . . . PENTODE . . . BIAS VOLTAGE . . .!!!

I was forced to leave soon after . . . I couldn't stand the sight . . . CBers were shouting "That was Ira the Ham . . . and I touched HIM!" They were gouging their eyes with their fists while quiverinbg voices muttered "It was . . . really it was . . . oh please don't tell me it wasn't . . . a real Ham . . . a real Ham!!! I touched Him! Did ya hear that?? I TOUCHED A REAL HAM!!!

Wilson *the First Name in Amateur Hand-Helds*

New 2 Meter Mark II and Mark IV

The new arrivals to the Wilson family of quality high performing hand-held radios are the small American-made MARK II and MARK IV. The ultimate hand-held for the amateur who demands quality, performance and value.

As the smallest size hand-helds ever marketed, the radios feature excellent adjacent channel selectivity, and innermod/image rejection. The attractive blue-gray Lexan® outer case is rugged and durable.

Features:

• 6 channel operation • individual trimmers on all TX/RX Xtals • microswitch control of TX/RX • includes improved rubber flex antenna and one pair Xtals 146.52/.52 installed • built-in microswitch speaker-mic • 90 day warranty • BNC type antenna connector • can be modified for MARS or CAP • inexpensive rechargeable Ni-Cad battery power source • easily accessible circuitry. • a variety of accessories and tone options are available. (See Page 17.)

MARK II
2.5 watt
$229.95

MARK IV.
4 watt
$259.95

TT Pad
$61.95

Illustrated is the Mark IV 4 watt unit with optional touch tone pad.

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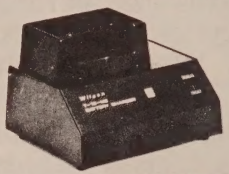
HAND-HELD OPTIONS AND ACCESSORIES

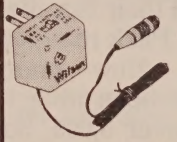
The following are available for Wilson's Hand-Helds, presented on



• LEATHER CARRYING CASE
• LC-1 for 1402SM
• LC-3 for Mark II, IV
• LC-2 all others
$19.95

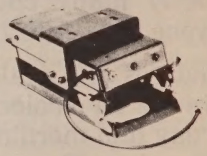
• 110V-AC DESK BATTERY CHARGER
For new units Mark II, IV - use the Model BC-2; for Models 1402, 1405, 1407, 2202 and 4502, use Model BC-1.
$39.95

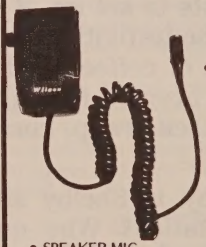
BP-2
NI-CAD
BATTERY PACK



• RECHARGEABLE BATTERY PACKS
Use the following Ni-Cad Packs for the unit you select:
• BP-1 . . . 10 loose cells - 500 mA (1402, 1405)
• BP-2 . . . strapped cells - 600 mA (1405, 2202, 4502)
• BP-4 . . . Mark II, Mark IV pack
• BP-7 . . . 1407SM high power pack

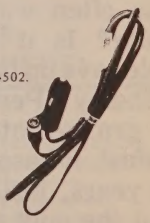
• WALL BATTERY CHARGER
110V-AC Charger . . . use WC-12 for 1402, 1405, 1407, 2202, 4502; use Model WC-14 for Mark II, IV.
$19.95





• MOBILE AMPLIFIER/CHARGER
The Model 1420A is a mobile amplifier/charger for the hand-held models 1405SM and 1407SM. Produces 20 watts on the 1405 and 25 watts on the 1407 when engine is charging above 12V-DC, and charges internal Ni-Cad battery pack.
$139.95

• SPEAKER MIC
• SM1 — for Models 1402, 1405, 1407, 2202, 4502.
• SM3 (Mark II,Mark IV)
$30.95



• BC12 -
CIGARETTE LIGHTER MOBILE POWER PLUG
$14.95

Other options include:
• Touch Tone® Pad (installed only)
• XF-1 Monolithic Filter (1402, 1405, 1407)
• TE-1 Eone Encoder
• TE-2 Encoder/Decoder
• BNC Rubber Duck Antenna
• TNC Rubber Duck Antenna

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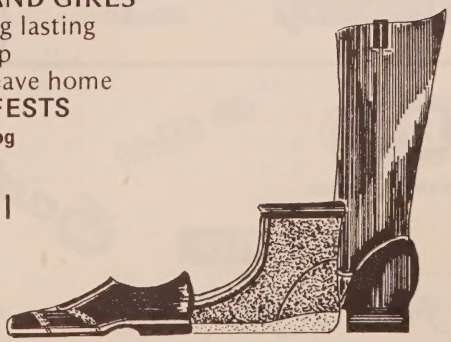

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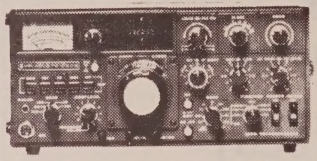
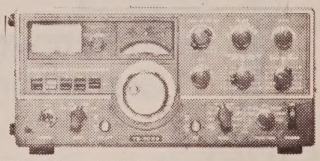
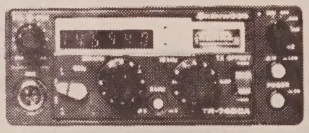


TS-520S

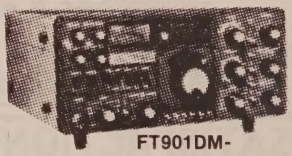


TS-820S



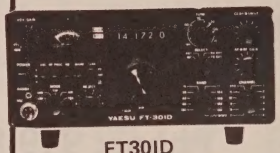
TR7400A

YAESU



FT901DM-

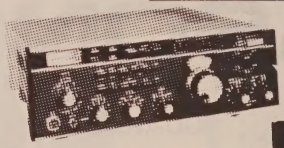
FT22IR



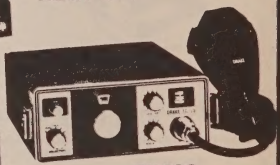
FT30ID

FT101E

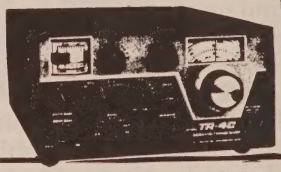
DRAKE



NEW! TR-7-



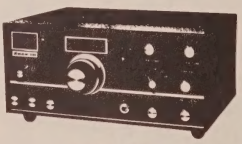
TR33C



TR4CW

SWAN ELECTRONICS
A subsidiary of Cubic Corporation

750CW



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Sara Secretary

FRECK RADIO AND SUPPLY CO., INC.

Celebrating Our 50th Anniversary

ANNUAL BLUEFIELD HAMFEST TO BE AUGUST 27th

The East River Radio Club of Bluefield (W.Va.) will sponsor its annual Hamfest at the City Park Auditorium in Bluefield on August 27th. The Fest which features indoor flea market will also have displays for the ladies.

Saturday Evening, Aug. 26, the club will sponsor a Hospitality room at the Highlander Motel. Talk-in will be 16-76 and 3.947 mhz.

Aside from prizes to be given away throughout the day, there will be a demonstration of Microprocessers.

FCC EXAMINATION SCHEDULE

SALEM, VA. . . . . .Sept. 6-7
CHARLOTTE, N.C. . . . . July 12-13
WILMINGTON, N.C. . . . . .Nov. 1-2
WINSTON-SALEM, N.C. . . . . June 7-8, Aug. 2-3, Oct. 4-5, Dec. 6-7

SSB STILL OK ON 2-METERS

Several SSB operators on 2-meters have expressed fear now that 20 channels have been provided for FM in the 144 to 146 mhz region. However the near nationwide bandplan and the one the CVRA officially adopted calls for 144.9 to 145.1 mhz to remain clear for SSB and non-channelized communications (which means SSB and CW) Also aside from the 200 khz in the center of the Sub-band, 500 khz below and 500 khz above is still left available for SSB.

REPEATER WEATHER

I thought CVRA would like to know that the National Oceanic and Atmospheric Administration Weather Reports are now available on the Winchester Repeater, WR4AGT, 146.22/82 MHz. Access for the weather reports are via touch-tone six (6). (Virginia, WA4QWC)

NEW 144.5 - 145.5 BAND PLAN

It should be noted that a large portion of space is still provided for SSB operation between the inputs and outputs of the FM portion. This is what makes the plan workable, utilizing the frequencies to a point where 20 additional repeater channels are available, yet leaving 500 khz below, 200 khz in between and 500 khz above for SSB and weak signal simplex operation.

THE PLAN

A total of 20 channels, 20 khz spacing, no splits. The first channel starts at 144.51 and the last at 144.89. Input/output spacing, 600 khz. The section from 144.9 to 145.1 (200 khz.) is reserved for non-channelized communications, weak signal, ssb, etc. Here are the repeater channels as recommended by the CVRA: Inputs/Outputs listed.

144.51 - 145.11	144.65 - 145.25	144.79 - 145.39
144.53 - 145.13	144.67 - 145.27	144.81 - 145.41
144.55 - 145.15	144.69 - 145.29	144.83 - 145.43
144.57 - 145.17	144.71 - 145.31	144.85 - 145.45
144.59 - 145.19	144.73 - 145.33	144.87 - 145.47
144.61 - 145.21	144.75 - 145.35	144.89 - 145.49
144.63 - 145.23	144.77 - 145.37	

144.9 to 145.1, 200 khz. reserved for weak signal, SSB, etc. (Direct Communications.) Persons wishing to place repeaters in this portion of the band are urged to use the pairs listed above, and COORDINATE through your repeater council.

YOUR HOME REPEATER-SUPPORT IT

-Reprinted from CVRA 1976 Handbook

Everyone has a "HOME" . . . and yes that's true for VHF FM operators too. Most VHF Fm operators purchased, built, or modified equipment for their use primarily because of the availability and advantages of repeaters. Certainly, all of us use simplex frequently, but most of the time we monitor or congregate on a repeater channel.

And does the repeater draw a crowd? Yes sir . . . the word soon gets around about how good the local repeater is. You can operate 10 watts from your mobile while going to and from work, and talk 80 to 100 miles away with no problem. And if one repeater is occupied, you can switch channels to another one . . . real nice isn't it?

But what happens in the morning when you start to work, and you key the input to the local repeater, and nothing happens? Well, first you try again . . . and no squelch tail. Then you turn the squelch control on your transceiver to see if you can hear any noise . . . right? Key the mike again . . . still no repeater. Then you quickly switch channels to see if you can hear or hit another repeater . . . fearing all along that something may be wrong with your rig. Yes, most of us think something is on the blink in our rig when the local repeater doesn't emit its melodeous CW call when we key down on the input frequency. Admit it or not, we use the repeaters as standards, and we expect them to be there.

And most of us have one particular repeater that we monitor above all the rest . . . yes that repeater is our "HOME" repeater. It may not be in the same town as we, and we may not be a member of the club that operates it, but we still consider it "HOME".

Now what is my obligation as a user of this "HOME" repeater? Well first and foremost, be sure to stay on your best manners when using the repeater . . . after all, some fellow Amateur has placed himself in the vulnerable position as Trustee of the repeater . . . so at least honor that point. Next, lend financial support to the repeater owner, whether it be a club or individual, makes no difference. Make a financial donation periodically . . . whatever you think is fair. Don't tell the owner, "Well just call on me next time you need some money, you know me, I'll be glad to give." Chances are, you will never be asked directly to donate to a repeater. Most Amateurs just don't want to ask . . . and the ones that do, are condemned openly for it.

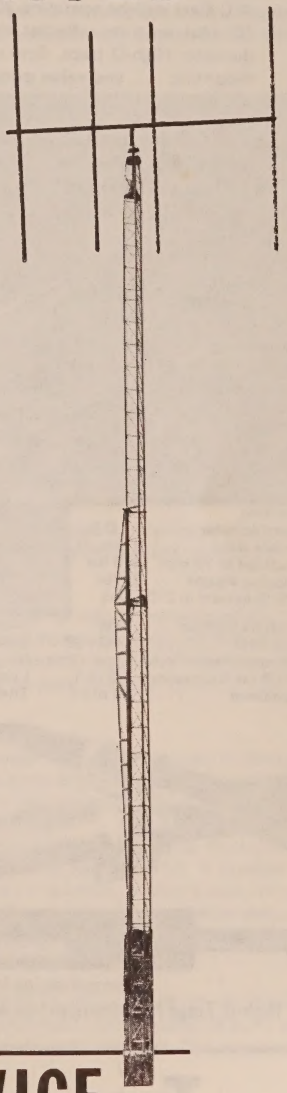
A repeater owner, club, or individual, must have funds available for: (1) the initial costs for equipment and installation, (2) the maintenance and operating costs, and (3) improvements and modifications.

Initial equipment costs and installation may run as low as $400, but most machines now run more. The cost of the receiver/cor/transmitter is not necessarily the primary cost . . . but other items such as timers, remote control equipment, tower, antennas, feed lines, cavities, duplexer, its preparation and building costs push the initial investment up in a hurry. Usually all of these initial costs are absorbed by a very small number of individuals, as you don't stand a chance of getting any support at all until the machine is operable.

Most owners start feeling the financial pinch after the machine is on the air . . .

Continued on Page 45

ROHN & CONSOLIDATED TOWERS



Utility Poles Installed

Tower and Pole Accessories

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Rotor Plates

Guy Wires

Pole Steps

CDR Rotors

Crankup Telescoping Mast
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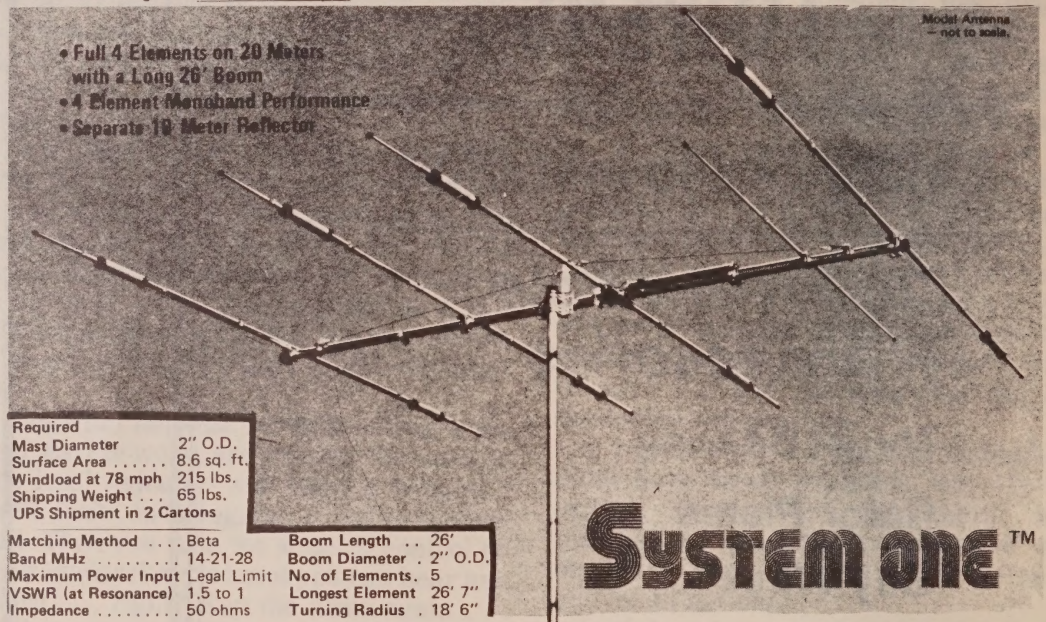
THE NEW INDUSTRY STANDARD OF PERFORMANCE . . . IS THE Wilson SYSTEM ONE!

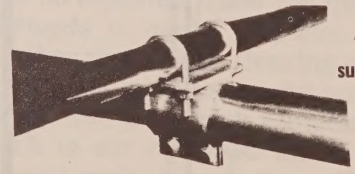
A DX'ers delight operating 20 meters on a full 26' boom with 4 elements, 4 operational elements on 20-15-10, plus separate reflector element on 10 meters for currect monoband spacing. Featured are the large diameter High-Q traps, Beta matching system, heavy duty taper swaged elements, rugged boom to element mounting . . . **and value priced!** Additional features: SWR less than 1.5 to 1 on all bands


Model Antenna
– not to scale.
• Full 4 Elements on 20 Meters with a Long 26' Boom
• 4 Element Monoband Performance
• Separate 10 Meter Reflector

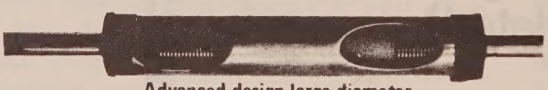
Required	
Mast Diameter	2" O.D.
Surface Area	8.6 sq. ft.
Windload at 78 mph	215 lbs.
Shipping Weight	65 lbs.
UPS Shipment in 2 Cartons	

Matching Method	Beta	Boom Length	26'
Band MHz	14-21-28	Boom Diameter	2" O.D.
Maximum Power Input	Legal Limit	No. of Elements.	5
VSWR (at Resonance)	1.5 to 1	Longest Element	26' 7"
Impedance	50 ohms	Turning Radius	18' 6"

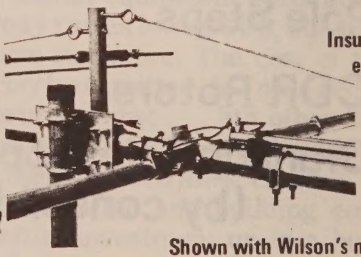
SYSTEM ONE™



The mechanically superior construction uses heavy duty boom to element extrusion.



Advanced design large diameter High-Q Traps for minimum loss and maximum power capacity



Insulated driven element with precision Beta match and heavy duty element mounts. Shown with Wilson's new optional Toroid Core BN-50-A Balun.

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4349 KERNERSVILLE RD. - (Hwy. 150 S. I-40) KERNERSVILLE, N.C. 27284 - (919) 784-8833

NORTH CAROLINA STATE NEWS OF INTEREST . . .

KERNERSVILLE . . . Johnny Wood, AB4X reports plans for a 2-meter repeater in Kernersville, South of the city on highway 150. The machine will be primarily for HF DXers, however he said it will be an open, carrier accessed machine. AB4X/R is coordinating with the CVRA for the proposed frequency of 144.61-145.21. The repeater will be constructed from a Regency with a Newtronics G6-144 antenna. Johnny said he hopes to have the machine on the air sometimes in September, at which time he will join the CVRA as a full member.

CONCORD/KANNAPOLIS . . . The 146.055-655, K4CEB/R repeater has been moved to a water tank in Northern Concord. The group reports they will be gaining about 100 feet in height for the repeater which was earlier located atop the Court House. Tommy Blanchard said they expect better coverage on the machine. A 4-bay Antenna Specialist "J" Pole and 2 additional cavities to the duplexer will also help out. (Tommy, WA4UPO)

ADVANCE . . . Tommy WB4SNA reports the 147.525 simplex link is working well and getting plenty of use. The link accesses the 855-255 repeater in Asheboro which is linked to the 28-88 repeater in Raleigh. Tommy reports construction is underway for his 220 repeater. The 222.54-14 machine will enable 220 access to the linking system from the Advance area. He said the future plans call for a 2-meter master linking repeater (probably on the sub-band) from Sauratown Mt. The frequency is presently being coordinated with the CVRA. (Tommy, WB4SNA)

FRANKLIN . . . A new 220 mhz repeater is planned for the Franklin area. The machine being tested on 223.34-224.94 will be frequency coordinated with the CVRA. Charles Hartzog, WD4LVF, and Tom Shields, WB4AIQ are constructing the repeater from a Midland and VHF Engineering boards. Meanwhile the 96-36 2-meter repeater on Cowee Bald Mt. in operation about 4 months is giving excellent coverage. The machine is sponsored by the Franklin ARC. (Charles, WD4LVF)

ROBBINSVILLE . . . It is reported a repeater on a mountain near Robbinsville is under construction and testing on 915-315. The VHF Engineering machine, a surprise to the CVRA is reportedly due on the air in August. (Tnx, WD4LVF)

SALISBURY . . . The frequency of 223.16-224.76 has been coordinated for the Rowan ARS to put a repeater on the same site as the 13-73 2-meter repeater. The machine is being constructed from VHF Engineering boards. No date is available for the machine to be operational. (K4DFI, J.C.)

KING . . . Danny, WA4YGD is constructing a 220 repeater for primarily RTTY, but also available for voice communications. The CVRA has coordinated the frequency of 222.80-224.40 for the machine being constructed from a Regency HR220. Danny will be moving to an area east of Greensboro in the future, and the machine will be permanently located in that area. The machine will be utilized to enable Burlington RTTY operators and Greensboro operators to work Teletype on 220. (Danny, WA4YGD)

BURGAW . . . The frequency of 34-94 has been coordinated for a new 3-meter repeater to be constructed in Burgaw (between Wilmingtona nd Jacksonville). The K4LZY/R repeater should be operational by early September. The Four County ARC, Inc. has joined the CVRA, and Raymond Fields, K4LZY and J.B. Shepard, W4YBA are repeater reps. (WB4DBB)

SALISBURY . . . The Barber Junction Repeater Association which supports the 13-73 repeater along with the Rowan ARC has shown strong growth this year. Last year they had 35 members and 1978 membership stands at 52. A number of improvements have been done to WR4AAA. A new solid state repeater has been placed in service, driving a new 4X150 amplifier. A Heath 40 watt amplifier is held in reserve. An autopatch has been installed on the machine for the convenience of members. An automatic battery charger security gate, new door, and heavy duty locks have been also added to the site. (J.C. K4DFI)

FAYETTEVILLE . . . The 93-33 repeater in Fayetteville is now under new sponsorship. A group made up of W4LPL, WA4YMM, WA4YMD and WD4AAC assumed the frequency and put on a repeater they purchased. Carl Pressler, W4LPL said all amateurs in and passing through the Fayetteville area are invited to use this "Red Carpet" open repeater. The machine is operating under the call W4LPL/R. (Tnx Carl, W4LPL)

WILMINGTON . . . The Wilmington VHF Assn. has taken control to operate and maintain the WR4AVF repeater in Wilmington. Fred Mohr, N4WI will be trustee of the 13-73 repeater. The club plans to upgrade the repeater with autopatch in the future. (Eddie, W4NYQ)

LUMBERTON . . . The Lumberton ARC is now sponsoring the WR4BDQ 96-36 repeater in Lumberton. The group holds a net nightly at 8:30 on the machine. (Eddie, W4NTQ)

SOUTH CAROLINA STATE NEWS

CLEMSON . . . The Keowee-Toxaway ARC reports in a letter that their 87-27 repeater is finally on the air under the call of WA4JRJ. The group first planned a repeater and coordinated the frequency in 1976. Since then, very little had been heard from the group. The repeater is located atop Long Mt. about 11 miles north of Walhalla. (Ed. note: For clarification, the repeater will be listed "Long Mt." in the index.)

EASLEY . . . The Altamont ARC plans construction of a new 220 mhz repeater for the Easley area. The frequency of 222.46-224.06 was coordinated by the CVRA. The machine is expected to be on the air very soon. (WA4SEJ, Rick Tillotsen)

DILLON . . . R.C. McDowell, WB4EMK has requested frequency coordination for a repeater for the Dillon area. The Journal was unable to obtain any additional information.

COLUMBIA . . . The sub-band frequency of 144.61-145.21 was coordinated to the Mid-Carolina Repeater Association for a new repeater for the Columbia area. The group reported earlier that they planned to have the machine on in late July. The machine will have auto-patch for supporters of the group. Coverage is for mid-portion of South Carolina and the lower part of S.C. (Paul, K4AVU)

GREENVILLE . . . Wade W4AZT reports the 220 mhz. repeater scheduled for that area moved frequency from 222.32-223.92 to 222.30-223.90 and is presently under construction. W4AZT/R is the 2nd repeater in Greenville under construction and is a member of the CVRA. (CVRA File)

ROCK HILL . . . Lane Tarleton, WA4ZQQ, president of G.I.S.M.O. of Rock Hill has been named by Lindsay Cleveland, W4IZI, as S.C. Assistant Associate Membership Chairman. Lane is very interested in the CVRA and voluteered assistance. His job will be to promote the CVRA in the State and encourage more participation by Amateurs through Associate Membership. Incidentally, he has given scores of Memberships away through the store to people who purchased 2-meter rigs. (Wayne, K4MOB)

EAST TENNESSEE NEWS

KNOXVILLE . . . The Oliver Springs (Knoxville) repeater WR4ADQ, formerly on 16-76 is moving to 144.85-145.45. This move has been fully coordinated by Bill Moyers, WB4YPO, Tn. Rep. Coordinator and Herman Cone, WB4DBB, CVRA coordinator. This frequency change will eliminate one trouble spot as it moves WR4ADQ off the congested 16-76 pair in that area. (Bob, K4SE)

KNOXVILLE . . . There has been some talk about Tennessee becoming a part of CVRA. This was batted around at the Knoxville Hamfest by Bill Moyers, WB4YPO (Tenn. Freq. Coord), O.D. Keaton, WA4GIS, (Tenn. SCM), Carter Cogle, K4ARO, (CVRA VA. Dir.), Bob May, K4SE (Asst. Dir. SW Va. CVRA) and others. Generally favorable remarks were said and heard about the possible merger. Further talks are planned in the future. (K4SE, Bob May)

JOHNSON CITY . . . The new 87-27 Johnson City machine is doing a great job report the owners. Trustee of the CVRA member repeater is Jerome Christian, WA4DIU. The VHF Engineering machine is on the air 24-hours a day. The Autopatch is now working well after glitches were worked out. (Bob, K4SE)

ENGLISH MT. . . . The 13-73 WR4APU repeater on English Mt. continues giving good coverage in Eastern Tenn., SW Virginia and parts of Kentucky and N.C. The repeater owned by Sam Kirby, WB4HAP joined the CVRA as full members in June. The repeater operates 24-hours a day. The homebrew and VHF Engineering repeater is located on English Mt. 5 miles SW of Newport, Tenn. and 36 miles East of Knoxville. The antenna is an 8-dipole array, homebrew at the 3,700 ft. level of the mountain. Second CVRA representative is Matt Kirby. (CVRA files).

N.E. GEORGIA . . . Bill, WB4DPS who recently moved from Durham to Georgia has coordinated the frequency of 222.52-224.12 for his planned repeater on a mountain in Northeastern Georgia. North Carolina 220 repeaters in the Western part of the state will be keeping an eye on this one for possible 4-state linking on 220 mhz. (WB4DBB, Herman)

2nd ANNUAL BRISTOL HAMFEST SKED FOR AUGUST 19-20

The Bristol ARC, Inc. is sponsoring its 2nd Annual Bristol Hamfest August 19-20. The 2-day event will be held at the New Washington County Fair Grounds on Route 11 in Abington, Va.

Special activities are planned for the ladies, with games provided for children. Hot food will be available from a catering service, and local restaurants are near by.

The Indoor event will have no tables provided for Flea Market, patrons are asked to bring their own.

VIRGINIA STATE NEWS

TAZEWELL . . . The new 75-15 Tazewell repeater is on the air and seems to have excellent coverage in the SW Virginia and Upper East Tenn. areas. Several reports of West Va. stations working the machines have also come in. (Bob, K4SE, Mike, WA4JIY)

MARTINSVILLE . . . The WB4HAD Martinsville repeater formerly on 99-39 has moved to 885-285. The group which had the repeater on for only a few months, experienced some very unusual and unnecessary interference from a North Carolina repeater operating upside down from the CVRA and ARRL bandplan and only 10 khz. from the input. The group which had coordinated 99-39 with the CVRA agreed to move to the second frequency after the interference became intolerable. Editors Note: There is more behind this story than we care to publish, but we refuse to glorify anyone who apparently wants to operate indifferent from everyone else, save 2 others. (Wayne, K4MOB)

BLUEFIELD (W. Va.) . . . The new Bluefield, W. Va., repeater K8BHG/R is due to go on the air with regular service in early September. The repeater operating in a testing stage has the frequency of 144.89-145.49. The machine is sponsored by the East River ARC., with Randal hash, WB4BBF and Wade Stallings, WB4LRO as CVRA Membership representatives. Lee Brooks, K8BHG is Trustee of the machine. The repeater constructed homebrew and with VHF Engineering boards is located at 3,700 feet with stacked dipoles. The repeater is equipped with an open homebrew autopatch. (CVRA Files)

SALEM . . . S. L. Yorks, WD4NZX has requested coordination from the CVRA for two two-meter frequencies, one for wide coverage and one for local coverage. York had suggested 975-375 for the wide coverage machine, and 87-27 for the local coverage machine. No additional information is available at press time. (S.L. Yorks, WD4NZX)

BLUEFIELD (Va., W.Va.) . . . The 16-76 Bluefield repeater will be converted to a local coverage machine when the new 144.89-145.49 machine gets on the air. (Carter, K4ARO)

FRANKLIN-COURTLAND . . . A group of Amateurs are making plans for a repeater in that area of Virginia (SE of Richmond, near N.C. Line) The CVRA Virginia Director has coordinated the frequency of 915-315 for the group. No details of the repeater is available at this time. (Carter, K4ARO)

SALUDA-TAPPAHANNOC . . . A group plans a repeater in this area of NE Virginia. No frequency has been announced. The group will be coordinating with T-MARC (Carter, K4ARO)

RICHMOND . . . The Richmond 28-88 and 34-94 machines continue giving good coverage in the area. It is reported a group of C & P Telephone Co. hams are constructing a repeater to operate on 04-64 in the area. Further details later. (Carter, K4ARO)

WILLIAMSBURG . . . Dick, W4NTG reports the new Williamsburg repeater is scheduled to go on the air very shortly, possibly by the time you read this item. The machine will be on 07-67. (Carter, K4ARO)

GRUNDY . . . The Grundy Groundwave ARC has coordinated the frequency of 90-30 for a future repeater in that area. Further details to come. (Carter, K4ARO)

LYNCHBURG . . . A new 450 mhz repeater has been placed on the air at the home of Ed Harper, WB4IUS. The machine will be on the air in the evening hours. Operating on 449.5-444.5, WB4IUS/R expects good mobile coverage in Lynchburg, Bedford and surround counties. WB4IUS has joined the CVRA as a full member. His 2nd repeater representative is Ray Smith, WA4UKZ. (Herman, WB4DBB)

YES THERE ARE CLEAR CHANNELS

Any repeater groups looking for a clear channel for their repeater on 2-meters, should certainly consider the sub-bands especially if the machine will be a wide coverage one. There are 20 brand new channels available, although many Clubs are already deciding this is where to go. Several repeaters are listed on the sub-bands now in the Journal.

CVRA BAND PLAN SIMILAR TO ARRL

The CVRA 2-meter band plan has followed the ARRL band plan very closely in all instances. The 146-147 split frequencies were listed by ARRL as low in up to 147.00 and then high in above 147.00. To enable more channel for an already crowded territory, the CVRA opted the option provided by the ARRL and utilized both hi and low in for the beginning 147.00 frequencies. Thus gaining 3 additional channels. Low in consists of 146.40-147.00/146.43-147.03 and 146.46-147.06. The Hi in consists of 147.60-147.00/147.63-147.03 and 147.66-147.06. Outputs of repeaters do not interfere, only inputs, so closer ranges could be utilized with these outputs near, with inputs different.

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VHF WEEKEND WAS HIGHLY COMPETITIVE LAST JUNE

— Journal Cover Story

The ARRL sponsored VHF QSO party last June was highly competitive in this area. Several new clubs were heard on the bands, doing their bit for contact points.

During the weekend, 6-meters was fair to good for most, Sunday evening it opened wide open into the Northeast. 2-meter SSB also had good conditions during the periods with clubs scoring highly on this band.

220 mhz played an active part in the contest this year, as well as more 432 mhz activity. Some clubs reported 5 states and more than 50 contacts on 220 and equally as well on 432.

The old standard, 2-meter FM, still hampered by the restricted use of 146.52 direct, was quite busy. Then again, it suffered because of many who don't have 55, and 58 to give the contesting clubs points. Also the little man who worked his contest with a single beam and 10 watts at his home on 52 direct has all but disappeared. He never passed in his logs, but just worked for the fun of it and also gave points to the competing clubs.

Several clubs were notified to send the Journal information about their VHF QSO party activities in Va., N.C. and S.C., but only two group saw fit to respond, so our report continues with their activities.

Greensboro Repeater Association

The GRA, owners of WR4AOD, 16-76 in Greensboro operated the VHF QSO party from atop Beech Mt. at 5600 ft. with the call of K4CAW (Al Ross, Greensboro). The group assembled two 30-foot Rohn towers, and one 30-foot mast for their antennas: 6-element, Hi-gain for 6 meter SSB, Two 14-element KLM for 2-meter SSB, and 2 KLM for 2-meter FM. 2 Stacked 11's by Cushcraft were used for 220 mhz. and 2 KLM 16-element beams stacked were used for 432.

The club operating out of a 40-foot tractor trailer used Kenwoods with 6N2 kilowatt amplifiers for 2-meter FM and SSB. On 6-meters they used a Swan 250 with a converted Heath SB220. 220 mhz utilized a Midland and Clegg with preamps and a 100-watt VHF Engr., Amplifier.

On 432 the GRA used 50 watts on a home-brew amplifier. The group comprised of some 15 locals scored in the neighborhood of 50,500 points.

N.C. VHF Contest Association

The NC-VHF-A a group of amateurs from the Morganton, N.C. area worked the VHF QSO party from a mountaintop location near Boone. The club organized strictly for contest purposes and have continued for a number of years, adding new members who are seriously interested in good contesting.

During the June contest, the group operated 6-meter SSB, 156 contacts, 26 sections; 2-meter FM, 77 contacts, 2-meter SSB, 82 for 14 sections; 220 mhz FM, 22 contacts, 2 sections; and 432 SSB, 18 contacts, 5 sections. The group tallied a score of over 18,000 points.

Equipment in use included a Swan 250 with Swan MK6B on 6-meters, an Icom IC-211 and Yaesu FT-221 on 2-meter Fm and SSB with a 400 watt amplifier. On 220 a Clegg FM-76 was used and a 620B Micromodule was used on 432 SSB. Antennas included a 5-element Hi Gain on 6-meters, and Cushcrafts on the other 4 bands. The group operated under the call of WA4WZQ (David Smith, Valdese).

The Greer Amateur Radio Club

The Greer (S.C.) ARC joined the throng for the VHF-QSO Party at Cedar Mountain in South Carolina. The club operated

Contd. on Pg. 44

NORTH CAROLINA REPEATERS

Two Meters

Albemarle	WR4BBX	146.385	146.985		
Asheboro	WR4BBX	147.885	147.255		A
Asheville	WR4AEV	146.16	146.76		
Asheville	W4NQA	146.31	146.91		A
Aurora	WR4ABQ	146.34	146.94	N	O
Benson	WR4ARL	147.87	147.27		PA
Boone	WR4ATQ	147.96	147.36		
Burgaw	K4LZY	146.34	146.94		
Burlington	WR4AKY	146.07	146.67		A
Burlington	WR4AIF	146.475	147.075		A
Charlotte	WR4AEU	146.34	146.94		A
Charlotte	WR4ALO	146.46	147.06	N	A
Charlotte	WR4ABK	147.78	147.18		
Charlotte	WR4AWQ	147.99	147.39		
Concord/Kann	K4CEB	146.055	146.655		A
Durham	WR4AGC	146.22	146.82		
Durham	WR4BEK	146.34	146.94		
Durham	WR4AJY	147.38	147.98	N	
Eden	WR4AZX	147.84	147.24		
English Mt.(Tn.)	WR4APU	146.13	146.73		
Erwin	WR4ALY	146.43	147.03	N	
Elizabeth City	WR4ADN	146.46	147.06		A
Fayetteville	WR4BCA	146.115	146.715	N	
Fayetteville	WR4ANN	146.31	146.91		A
Fayetteville	W4LPL	147.93	147.33		
Forest City	WR4AHA	146.07	146.67		A
Franklin	WR4ALD	147.84	147.24		
Franklin	WR4	147.96	147.36	N	
Gastonia	WR4BAD	146.205	146.805	N	L
Gastonia	WR4ATP	147.72	147.12	N	
Gastonia	WR4AXH	147.81	147.21		
Greensboro	WR4BBE	146.01	146.61		A
Greensboro	WR4AOD	146.16	146.76		
Greensboro	WR4AWZ	147.63	147.03		A
Greensboro	WR4ANP	147.72	147.12		EA
Greensboro	WR4ANL	147.81	147.21	N	
Greenville	WR4AMB	147.69	147.09		A
Grifton	WR4ABP	146.16	146.76		
Hendersonville	WR4ALC	146.04	146.64		
Hickory	WR4ACM	146.25	146.85		
High Point	WR4AFV	146.19	146.79		
High Point	WR4ADT	146.40	147.00		A
Hillsborough	WR4AGC	147.825	147.225		A
Indian Trail	WR4APY	147.30	147.90	N	
Jacksonville	WR4ATW	146.34	146.94		A
Jacksonville	WR4AJG	146.40	147.00		A
John. Cty (Tn.)	WA4DIU	147.87	147.27		A
Kernersville	WA4RGV	147.915	147.315		
Kings Mtn.	WR4AYN	14.37	146.97		
Lak Toxaway	WR4AGH	147.795	147.195	N	
Laurinburg	WR4AOX	146.10	146.70		
Lenoir	WR4ARG	147.93	147.33		
Lexington	WR4ABX	146.31	146.91		PA
Lexington	WR4BDA	147.90	147.30	N	C
Lumberton	WR4BDQ	147.96	147.36		A
Maco	WR4	147.66	147.06	N	
Manteo	WR4AKB	146.34	146.94		A
Marion	WR4BBN	147.705	147.105		
Monroe	WR4AJX	147.30	147.90	N	
Mt Airy	WR4ACJ	146.37	147.97		A
Murfreesboro	WR4AFB	146.31	146.91		PA
New Bern	WD4JMS	146.01	146.61		A
Pine Bluff	WR4BAR	147.84	147.24		
Raleigh	WR4ACF	146.04	146.64		
Raleigh	WR4AOE	146.28	146.88		PA
Reidsville	WR4ADE	146.25	146.85		A
Roaring Gap	WR4AGS	146.22	146.82		
Rocky Mt.	WR4ADN	147.72	147.12		A
Salisbury	WR4AAA	146.13	146.73		PA
Sanford	WB4EJJ	147.78	147.18		
Seven Springs	WR4AEF	146.25	146.85		A
Shelby	WR4ABF	146.28	146.88		
Shelby	WR4AWU	147.84	147.24		
Smithfield	WR4BBO	146.37	146.97		
Statesville	WR4AZS	146.085	146.685		
Waynesville	N4SM	147.87	147.27		
Wilmington	WR4AVF	146.13	146.73	N	
Wilmington	WR4AHL	146.22	146.82		
Winston-Salem	WR4ARD	146.04	146.64		A
Morganton	WR4AQ1	147.75	147.15		

50 Mhz (6 Meters)

Cary	WR4AVP	52.35	53.35		
Durham	WR4ASZ	52.15	53.15		L
Fayetteville	WR4ADK	52.07	53.07		
Graham	WR4AYO	52.45	53.45		P
Hendersonville	WR4ALC	52.01	53.01		O
Hickory	WR4ACM	52.47	53.47		
Raleigh	WR4BDU	52.25	53.25		
Raleigh	WR4ADE	52.05	53.05		
Sauratown Mt.	WR4AOW	52.17	53.17		C

220 Mhz (1¼ Meters)

Asheville	WR4AEV	222.34	223.94		
Durham	WR4ASZ	223.34	224.94		P
Durham	WR4ASZ	222.50	224.10		L
Fayetteville	WR4ADK	222.42	224.02		C
High Point	WR4ADT	222.32	223.92		
Hillsborough	WR4AGC	222.34	223.94		
King	WR4BBS	222.80	224.40	N	C
Lexington	WR4BDA				P
Locust	WR4BBA	222.40	224.00		
Mocksville	WB4SNA	222.54	224.14	N	C
Raleigh	WR4BDU	223.04	224.64		
Salisbury	WR4AAA	223.16	224.76		
Sauratown Mt.	WR4AOW	223.28	224.88		
Winston-Salem	WR4ARD	223.10	224.70		R

450 Mhz (3/4) Meters)

Asheville	WR4ALE	449.90	445.90	N	C
Burlington	WR4AKY	439.25	427.25		VC
Charlotte	WR4ALO	449.85	444.85	N	
Durham	WR4ASZ	449.35	444.35		
High Point	WR4ADT	447.90	442.90		
Hillsborough	WR4AGC	449.10	444.10		A
Moyock	WR4BBP	447.10	442.10		C
Sauratown Mt.	WR4AOW	448.00	443.00		C

SOUTH CAROLINA REPEATERS

Two Meters

Anderson	WR4AIO	146.37	146.97		PA
Charleston	WR4ASP	146.16	146.76		A
Charleston	WR4AFX	146.34	146.94		T
Charleston	WR4BCP	147.87	147.27		A
Cheraw	WR4	147.63	147.03	N	P
Columbia	WR4	144.61	145.21	N	A
Columbia	WR4AYE	146.16	146.76		
Columbia	WR4ABA	146.28	146.88	N	
Columbia	WR4ACD	146.34	146.94		
Columbia	WR4	147.255	146.835	N	
Columbia	WR4AYE	147.84	147.24		A
Columbia	WR4ASE	147.96	147.36		A
Dorchester	W4NAT/R	147.78	147.18		

REPEATER SYMBOLS

N	NON Member CVRA	L	Linked
A	Autopatch	C	Under Construction
PA	Private Autopatch	P	Proposed Repeater
EA	Emergency Autopatch	O	Off Air Temporarily
T	Tone Access	V	Television
M	T-MARC Member Repeater	R	RTTY

Florence	W4ULH	146.25	146.85		
Florence	WR4AGM	146.37	146.97		PA
Greenville	WR4ADG	146.01	146.61		
Greenville	W4AZT	146.10	146.70		PA
Greenville	WR4ADG	146.22	146.82		A
Greenville	WR4ABG	146.34	146.94	N	T
Greenville	Wr4	147.645	147.045	N	P
Greenville	Wr4	147.765	147.165		P
Greenwood	WR4AUE	147.675	147.015		PA
Lancaster	WR4ABM	146.10	146.70		PA
Lancaster	WA4QPN	146.235	146.835		
Laurens	WR4AZM	146.25	146.85		
Little Mt.	K4AVU	147.81	147.21	N	C
Long Mt.	WA4JRJ	147.87	147.27		
Marion	WA4YLT	146.40	147.00		
Myrtle Beach	WR4AXC	146.01	146.61	N	
N. Augusta	WR4ABB	146.13	146.73		
N. Augusta	WR4ALS	147.93	147.33	N	
Orangeburg	WR4AQY	147.69	147.09		5A
Pickens	WR4ADP	146.40	147.00		
Rock Hill	WR4AJO	146.43	147.03		A
Savannah (Ga.)	WR4AKE	146.37	146.97		A
Savannah (Ga.)	WR4AQW	146.28	146.88		
Spartanburg	WR4BDT	147.69	147.09		PA
Summerville	WR4BCH	146.10	146.70		A
Sumter	WR4AOI	146.04	146.64	N	
Sumter	WR4	147.615	147.015	N	P
Sumter/Shaw	WR4AUS	147.66	147.06		A
Toccoa(Ga)	WR4AHB	146.19	164.79		
White Hall	WR4AQL	146.31	146.91		

50 Mhz (6 Meters)

Columbia	WR4	52.05	53.05	N	C

220 Mhz. (1¼ Meters)

Columbia	WB4URY	222.30	223.90		
Easley	WR4	222.46	224.06	N	C
Greenville	W4AZT	223.30	224.90		C
Greenville	Wr4	222.46	224.06	N	P
Greer	Wr4	222.38	223.98	N	P
Sumter	WR4AUS	222.34	223.94		

450 Mhz. (¾ Meters)

Charleston	WR4ASP	449.10	444.509	N	T

VIRGINIA REPEATER INDEX

TWO METERS

Alexandria	WR4AXB	146.055	146.655	N	
Alexandria	WR4ATZ	147.915	147.315	M	
Arlington	WR4AQP	146.22	146.82	M	
Barren Springs	WR4AFQ	146.07	146.67		
Berryville	WR4APE	147.90	147.30		
Blacksburg	WR4AXT	146.31	146.91	N	C
Blacksburg	WR4	146.43	147.03	N	C
Bluefield(W.Va.)	WR4AXS	146.16	146.76		A
Bluefield(W.Va.)	K8BHG	144.89	145.49		C
Briarpatch Mt.	WR4AHR	147.69	147.09		L
Brumley Mt.	WR4ATJ	146.01	146.61	N	
Bull Run	WR4ADZ	146.37	146.97	N	T
Charlottesville	WR4ATL	146.16	146.76		
Chesapeake	WR4ACN	146.19	146.79		PA
Chester	WR4AWC	147.99	147.39		
Covington	WA4HTI	146.22	146.82	N	
Culpepper	WR4BCS	147.72	147.12	M	
Cole Mt.	WR4BCI	147.93	147.33	M	
Courtland	WR4	147.915	147.315	N	P
Danville	WR4	146.325	146.925	N	P
Danville	WR4AHG	147.945	147.345	N	
Dublin	WR4AFQ	147.63	147.03	N	P
Fairfax	WR4AAD	146.19	146.79		PA
Farmville	WR4ASW	146.31	146.91		
Forest/Lynch	WR4ADY	146.16	146.76		A
Franklin	WR4ATB	147.90	147.30		
Galax	WR4AHR	146.34	146.94		C
Grundy	WR4	147.90	147.30	N	P
Gum Springs	WR4BBI	147.87	147.27		
Hampton	WR4ALW	146.13	146.73		
Hampton	WR4AFT	146.34	146.94	M	T
High Knob	WR4	147.81	147.21	N	P
Lexington	WR4	146.07	146.67	N	P
Lynchburg	WR4AXO	146.01	146.61	N	
Martinsville	WB4HAD	147.885	147.285		
McLean	WR4APC	147.81	147.21	N	A
Newport News	WR4	146.43	147.03	N	C
Norfolk	WR4ANT	146.10	146.70	N	O
Petersburg	WR4BDX	147.78	147.18		A
Portsmouth	WR4	146.25	146.85	N	C
Richmond	WR4	146.04	146.64	N	C
Richmond	WR4BBZ	146.28	146.88		PA
Richmond	WR4ADI	146.34	146.94		T
Roanoke	WR4AMQ	146.13	146.73	N	C
Roa/Salem	WR4AFE	146.28	146.88		L
Roanoke	WR4AHT	146.34	146.94	N	
Roanoke	WR4AFY	146.385	146.985		
Salem	WR4			N	
South Boston	WR4AYU	146.46	147.06		
South Hill	WR4BBU	147.84	147.24		
Staunton	WR4ACL	146.34	146.94	N	
Suffolk	WR4AKS	146.40	147.00		A
Tazewell	WR4QKH	147.75	147.15	N	
Tysons Corner	K4VYN	146.31	146.91		PA
Virginia Beach	WR4AAC	146.37	146.97		PA
White Oak Mt.	WR4BDN	146.10	146.70		
Williamsburg	W4NTG	146.07	146.67	N	C
Winchester	WR4AGT	146.22	146.82		
Wise	K4AXO	147.84	147.24	N	A
Woodbridge	WR4AII	147.84	147.24	N	A

50 Mhz (6 Meters)

Abington	WR4ATJ	52.01	53.01	N	L
Charlottesville	WR4AYG	52.76	52.525		
Lexington	WR4BCI	52.01	53.01	N	
Norfolk	WR4ATK	53.525	52.525		
Petersburg	WR4	52.55	53.55	N	C

220 Mhz (1¼ Meters)

Tysons Corner	K4GCM	222.34	223.94		
White Oak Mt.	WR4BDN	223.22	224.82		C

450 Mhz (¾ Meter)

Alexandria	WR4ANC	442.05	447.05	N	
Alexandria	WR4AAG	439.25	427.25	N	V
Charlottesville	WR4AYG	444.25	449.25		
Ft. Belvoir	WR4ATJ	444.125	449.125	N	
Lynchburg	WB4IUS	449.50	444.50		
Paris	WR4ANJ	444.80	449.80	N	
Roanoke	WR4AFY	442.50	447.50		L
Tysons Corner	WR4ABR	444.75	449.75		
Woodbridge	WR4AII	444.90	449.90	N	

VHF NET REGISTER (Local Times Indicated)

TWO METERS - FM

Anderson SC	37/97	WR4AIO	Anderson Radio Club Net	Daily	2000
Asheville NC	16/76	WR4AEV	Western North Carolina Tfc. Net	Tue	2030
Benson NC	87/27	WR4ARL	Johnson ARS Net	Daily	1930
Burlington NC	07/67	WR4AKY	Alamance County ARES Net	M F	2100
Catawba County NC	146.82		Catawba County RACES Net	Mon	1900
Charlotte NC	34/94	WR4AEU	Metrolina 2 Meter Emer. Net	Daily	2100
Danville Va.	10/70	WR4BDN	Last Capitol Service Net	TThSn	2030
Dorchester, SC	78/18	W4NAT/R	Dorchester AREC/RACES Net	1st Mon.	
Durham NC	34/94	WR4BEK	Triangle Radio Alert Net	Daily	2030
Durham NC	34/94	WR4BEK	Possum Trot Net	MF	0630
Fayetteville NC	31/91	WR4ANN	Possum Trot Net	MF	0630
Fayetteville NC	31/91	WR4ANN	Cape Fear ARS Net	Daily	1900
Florence SC	37/97	WR4AGM	Florence 2 Meter Net	Mon	2000
Greensboro NC	72/12	WR4ANP	Guilford County Emer. Net	Thu	2100
Greensboro NC	16/76	WR4AOD	CVRA Information Net	Wed	2100
Greenville NC	146.52		Brightleaf ARS Net	Tue	2100
Greenville SC	01/61	WR4ADG	Blue Ridge ARPSC Net	Daily	2100
Greenwood SC	765/165	WR4AEU	Abbeville-Greenwood Emer. Net	Tue	2200
Grifton NC	16/76	WR4ABP	ENC Emergency Net	Thu	2000
Laurens SC	25/85	WR4AZM	Laurens City ARES Net	MF	2030
Laurinburg NC	07/67	WR4AOX	Sand Hills Emergency Net	Daily	1930
Lumberton, NC	96/36	WR4BDQ	Lumberton ARC Net	MF	2030
Lynchburg Va.	01/61	WR4AXO	Lynchburg Two Meter FM Net	Tue	1900
Morganton NC	75/15	WR4AQI	W. Piedmont VHF Net	Wed	2100
Myrtle Beach SC	01/61	WR4AXC	Grand Strand 2 Meter Net	Wed	2100
Orangeburg SC	69/09	WR4AQY	VHF Net	Tue	1900
Raleigh NC	04/64	WR4ACF	RARS Net	MTThF	2000
Roanoke Va.	385/985	WR4AFY	Roanoke Valley ARC Net	Wed	2000
Rocky Mount NC	72/12	WR4ADN	Rocky Mount, ARC	Thu	2030
Salisbury NC	13/73	WR4AAA	Central North Carolina Tfc. Net	Daily	2200
Sumter SC	04/64	WR4AOI	Sumter Repeater Assn. 2 Meter Net	Mon	2130
Virginia Beach Va.	146.52		Virginia Beach AREA Net	Thu	2000
White Hall SC	31/91	WR4AOL	Coastal ARA 2 Meter Net	Thu	2100
Winchester Va.	22/82	WR4AGT	Shenandoah Valley Service Net	Daily	1915
Winston-Salem NC	04/64	WR4ARD	Forsythe County AREC/RACES Net	Wed	2100

1½ Meters (220 Mhz) - FM

Sauratown Mt. NC	3.28-4.88	WR4AOW	CVRA Information Net	Wed	2030
Hillsborough	2.34-3.94	WR4AGC	Piedmont 220 Net	TTh	2100

TWO METERS - SSB/CW/AM

Tidewater Sideband Net	Norfolk, Va.	145.025	Tue	2100
North Carolina S.W.O.T.	Greensboro,NC.	145.100	Tue	2100
Midwestern SSB Net	Cincinnati Ohio	145.020	STTh	2100
S.L.O.T. Net	Greenville,SC	145.110	MWF	2130
Hampton Roads Emergency Net (AM)	Norfolk, Va.	145.800	Mon	2000
Mid Atlantic 2 Meter Net	Washington,DC	145.100	Wed	2100

SIX METERS

Dixie Net (SSB)	Clemson,S.C.	50.125	Wed	2100
Charlotte Hornet Net (AM)	Charlotte, N.C.	50.400	Sun	2100
North Carolina 6 Meter Net (SSB)	Glendale Springs,NC	50.120	Sun	0900
Central Virginia Net (AM)	Richmond, Va.	50.250	Daily	1900
Tidewater SSB Net	Norfolk, Va.	50.150	Tue	2000

NET MANAGERS; Be sure to Give the CVRA a Plug. Encourage net checkins to Join the CVRA now, and receive the Journal. Thanks! Are there any changes to your net listing above? Send them to us for correction by Oct. 1.

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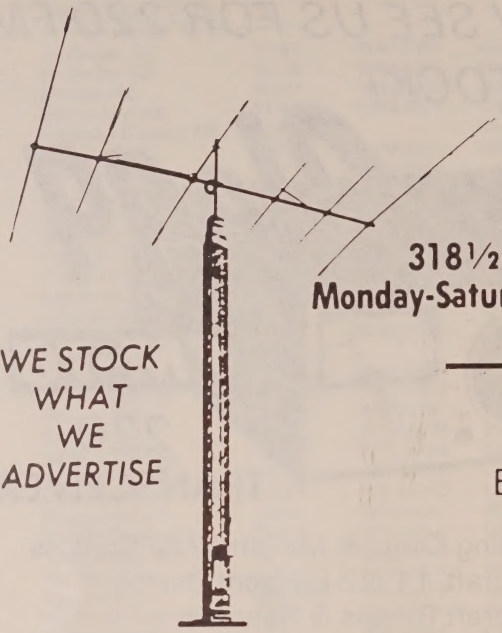

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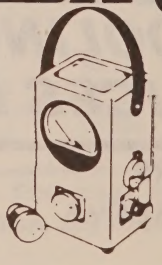

THRULINE WATTMETER

ELEMENTS
2-30 MHZ
25-1000 MHZ

CLUB MEETING CALENDAR

NORTH CAROLINA

ASHEVILLE - W. Carolina ARS-Bus. 1st Thur. 1900-conf. ru. Health & Soc. Bvc. Bldg. Dinner, 2nd Monday, 1900 - Hungry Bull, Patton Ave.
BENSON - Johnson ARS 3rd Thur. 1930 at 50-210 Fire Station
BURLINGTON - Alamance ARC 2nd & 4th Monday 1930, at 230 E. Summit Ave.
BURLINGTON - Alamance Repeater Assoc. Inc. Last Sat. 1900 at B & J Cafeteria
CARY - Cary ARC 4th Thur. 1930 at White Plains Methodist Church
CHARLOTTE - Mecklenburg ARS Last Tue. 1930-Red Cross Bldg on Park Rd.
CHARLOTTE - Charlotte RC 1st Thur. 19 - Club Bldg. - WSOC-TV Tryon St.
CHARLOTTE - Friday Lunch Group Fri. 1200 - Mediterranean Rest. on Independence Blvd.
CONCORD - Cabarrus ARS, 3rd Mon., 1930, Kimball Memorial Lutheran Church, Aux. Bldg., Kannapolis
DURHAM - Durham FM Assoc. - 2nd Tue. 1800 - Picadilly Cafeteria, S. Sq. S.S.
DURHAM - Triangle Radio Alert Network - 3rd Thurs. 1800 Picadilly Cafeteria, S.Sq. S.S.
EDEN/REIDSVILLE - Rockingham County ARC 1st & 3rd Mon., 1900 Wentworth Courthouse
FAYETTEVILLE - Cape Fear ARS 3rd Mon. 1900 - Methodist College,
FRANKLIN - Franklin ARC, 2nd Thur. 1900 - Macon Savings & Loan Assn.
GASTONIA - Gaston Cty. ARS - 1st Mon. 1900 - Community room at Eastridge Mall
GREENVILLE - Brightleaf ARC - 2nd Tues. 2000 - Planters Nat. Bank, downtown.
GREENSBORO - Greensboro ARA, 4th Mon., 1830, Founders Hall, Guilford College
GREENSBORO - Greensboro RC Fri. 1930-Club House near Friendship Airport
GREENSBORO - Ladies in Amateur Radio Soc. 1900 2nd Tues., Mbrs. Home, 4th Tues, Apple House Cafe
HIGH POINT - High Point ARC Tue. 1930 - Old Mill Rd.
JACKSONVILLE - Onslow ARC 2nd Sat. 1000 - Howard Johnsons Restaurant
KANNAPOLIS - Cabarrus County ARS 3rd Mon. 1930, Activity Bldg., Kimball Memorial Lutheran Church
LAURINBURG - Scotland County ARS 1st Wed. - Cablevision Office
LEXINGTON - Healing Springs Mt. VHF Soc. Last Mon. 1930 - Burlington House Furniture Co., Personnel Office
LUMBERTON - Lumberton ARC, 3rd Thu. Robeson County Public Library at 1930
MORGANTON - Morganton ARC, 1st Mon., 1930, W. Piedmont Community College
RALEIGH - Raleigh ARS - 1st Wed. 1930 - W. Community Room, Crabtree Valley Mall
ROCKY MOUNT - Rocky Mount ARS, 3rd Thurs., 1900 Farmer's Restaurant in Sharpsburg
SALISBURY - Rowan ARS & 4th Mon. 2000-Salisbury City Hall, Main Street
SHELBY - Shelby Radio Club 2nd Mon. 1830 Hungry Bull Restaurant, Dutch Supper
SILVA - Smokey Mt. ARC, 2nd Tue. 1900 - Southwest Tech. Institute
STATESVILLE - Iredell City ARS - 2nd Thurs. 1900 - Hall of Justice, Water & Tradd Sts.
WILMINGTON - Wilmington VHF Assn., 2nd Tue. of Jan. and all odd months, at Caro. Savings & Loan; Even Months, Social Meet at New Hanover Mem. Hosp. Ed. Bldg.
WINSTON-SALEM - Forsyth Amateur Radio Club, 2nd Friday - Nature Science Center

SOUTH CAROLINA

ANDERSON - Anderson RC 4th Thur. 1930 - Anderson County Library
CHARLESTON - Holiday VHF Soc. 2nd Wed. 2930 - Pinehaven Shopping Center Meeting Room
CHARLESTON - Charleston ARS, Inc. - Home Federal Meeting Room, Ashley Plaza S.S.
CHARLESTON - Trident ARC, 3rd Wed. 1930 - Park Cir. Presy. Church.
CLEMSON - Clemson Univ. ARC - (During school year - posted prior to meeting)
COLUMBIA - Carolina Repeater Soc. - 1st Mon. 1930 - S.C. Elec. and Gas Bldg.
FLORENCE - Florence ARC, Shoneys, 1st Tues. 1930
Florence - Florence FM Repeater Assn. 3rd Mon. 1930 Florence Darlington Technical Center
GREER - Greer ARC 1st Mon. 1930 Meeting Location announced monthly,
GREENVILLE - Blue Ridge ARS 1st Tue. 1930 Red Cross Building 3rd Tues. Dinner.
GREENVILLE - The Dutch Lunch Club - Mond. S & S Cafeteria at 1245.
GREENWOOD - Piedmont Tec ARC, 1st Mon. 1930 at Piedmont Tec.
KEEOWEE - Keeowee, Toxaway ARC, 3rd Tues. at Keeowee Toxaway Vistors Center
LAURENS - Caro. Computer and ARA 2nd & 4th Friday 1930 - Heritage Federal Savings and Loan Building
ORANGEBURG - Orangeburg ARC - 2nd Thur. 1930 - Quincy's Fam. Steak House
SUMTER - Sumter Repeater Assn. 3rd Mon. 2000 City/County Office Building Conference Room
WALTERBORO - Coastal Amateur Radio Assn. 2nd Sat. 1900, meeting announced on 31/91 net.

CALENDAR Continued on Next Page

VIRGINIA CLUB MEETING CALENDAR

ALBERTA - Southern Piedmont ARC - 3rd Thurs. 1900, Southside Va. Comm. Col.
CHARLOTTESVILLE - University of Virginia ARC every other Thurs., 1930 Thornton Hall, W4UVA
CHARLOTTESVIOLLE - Albemarle ARC 2nd Wed. 1930 at City Courthouse on 4th Street NE, WA4TFZ
COVINGTON - VHF Communications Assn. - 2nd Wed. 1930 at different mbrs. homes (82)
DANVILLE - Danville ARS, 1st & 3rd Friday, 1930 Danville Comm. Col.
FARMVILLE - Southside ARS, 1st Thursday 1930, Hampton-Sydney Col. Farmville, Virginia
LYNCHBURG - Lynchburg ARC 2nd Friday 2000 at Beulah Baptist Church, Leesville Road, K4HEX
MARTINSVILLE - Patrick Henry ARA, 3rd Tues., 1930, 1st National Bank of Martinsville and Henry Ctr.
NEWPORT NEWS - SPARC 1st & 3rd Wed. 1930 at Vepco Building in Hampton, WR4ALW (73)
NORFOLK - Hampton Roads Radio Assn., 2nd Thurs., 2000 Larchmont Library, Hampton Blvd., WR4ACN
NORFOLK - Tidewater ARC, 2nd & 4th Sat., 1000, Fort Norfolk, Hampton Blvd.
PETERSBURG - Crater ARS - 4th Wed. 1930 John Tyler Community College
PORTSMOUTH - Portsmouth ARC, 2nd & 4th Thurs., 11930 John Tyler Community College
PORTSMOUTH - Portsmouth ARC, 2nd & 4th Thurs., 11930, Art Center, 420 High Street
RICHMOND - (RATS) 1st & 3rd Fri. 1930 at the stone house in Forrest Hill Park, WR4ACW (88)
ROANOKE - Roa. Valley ARC 2nd & 4th Fri., 2000 - Colonial Ave. Presby. Church.
VIRGINIA BEACH - Virginia Beach ARC 1st Tue. 1900 at Virginia Beach Recreation Center, WR4AAC
WINCHESTER - Shenandoah Valley ARC 1st/3rd Fri. 2000 Club Building on Grace Street WR4AGT (82)

CLUB MEETING CALENDAR

The CVRA Journal will gladly make changes or list new clubs in the Club Calendar. Please notify the EDITOR in writing of your changes no later than the 1st of the Month prior to month of publication of the Journal.

REPORTING EMERGENCIES

Often times, we as mobile hams run across emergencies on the highway, where our 2-meter or 220 mhz rig can be a lifesaver. An autopatch call, or a telephone call by someone at his home can make the difference between life and death in some instances. When you run upon an accident, get out of the car and check with persons involved. Do they want you to call the police, do they require an ambulance, fire truck, etc. Make a note of the exact location of the accident. Which lane, what highway, how far from a familar landmark, or what milepose? How many vehicles are involved, what kind, are they blocking the highway? Is there fire, any injuries, how many?

Then call in your call to the POLICE. Let them call the ambulance and fire department if necessary, then you won't be held liable if something goes wrong. If someone is making the call for you, announce on the repeater, while he is busy, "This is K4AAA handling Emergency traffic, a clear frequency would be appreciated."

Remain by your rig, in case there are questions, and be prepared to answer any question or provide any information the police have. Your thoroughness before the call, and during the call will save time and perhaps lives.

Above all, don't get excited and talk too fast.

ASHEVILLE HAM FEST TO BE HELD OCTOBER 7 THIS YEAR

The Western Carolina ARS moves into the Asheville Civic Center this year for the annual Asheville "Autumnfest". The group suggest planning a weekend in the beautiful mountains of North Carolina. Attend the hamfest Saturday, and spend Sunday roaming the mountains during the crisp yet warm fall days. The event weekend should be about time for the fall change of color for leaves. The WCARS says all activities will be held indoors. A nice weekend can be planned for this one — hamfest and mountains in one weekend and one drive.

Asheville October 7, 1978

9A.M. to 6 P.M.

Autumnfest

Asheville Civic Center

ALL ACTIVITIES ON SATURDAY ONLY SO YOU AND YOUR FAMILY MAY ENJOY THE BEAUTIFUL FALL SCENERY OF THE SMOKEY MOUNTAINS ON SUNDAY.

TOP DOOR PRIZE: *R. L. Drake's Brand New*

TR-7/ DR-7

Solid State Transceiver w/AC Power Supply.

PLUS MANY, MANY OTHER PRIZES - HOURLY DRAWINGS STARTING AT 9:30 A.M.

Dealers from all over the area will be displaying the newest in amateur equipment.

Large INDOOR flea market area - $3.00/eight-foot table.

BINGO plus HANDICRAFTS demonstration by American Handicrafters, Inc.

Cartoons to entertain the youngsters.

McELROY MEMORIAL CW COMPETITION AT 2 P.M. — Pre-registration is required for participation.

Social get-together Saturday evening — 7:30 to 11 P.M. — in Civic Center.

MAIN PRIZE DRAWING TO BE HELD AT 4 P.M.

TICKETS: Admission for adults $2.00 at door - under 12 no charge.
Additional tickets at Autumnfest - $2.00 each or 3 / $5.00
Advance tickets $2.00 each - see attached form.
Autumnfest Committee Members ineligible for prizes.

MOTELS: This is a busy time in Asheville - PLEASE make your reservations early!!!!

TALK-IN: 31/91 - 04/64 - 16/76 - 52 - 94

FOR FURTHER INFORMATION OR ASSISTANCE: SASE TO — W.C.A.R.S.
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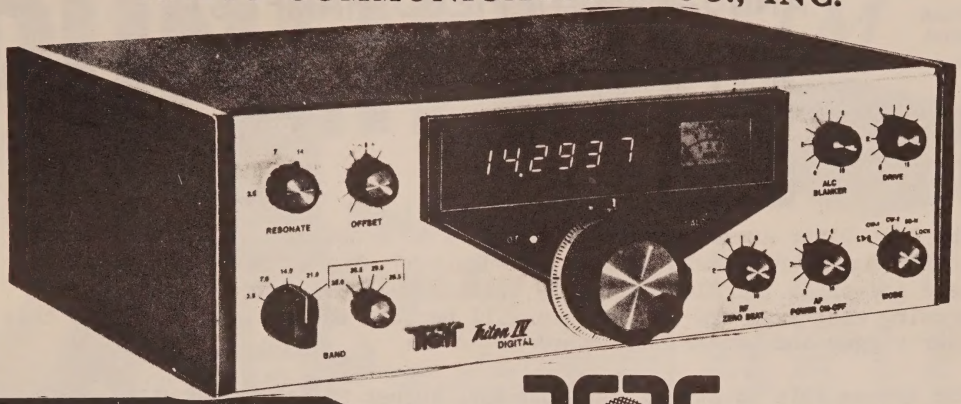

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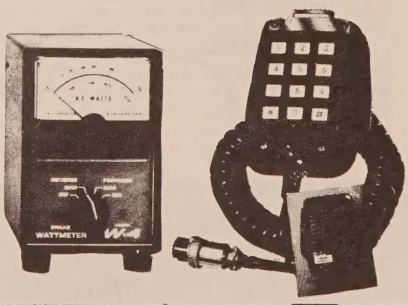

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ANNUAL BLUEFIELD HAMFEST

WR4AXS
146.16/76

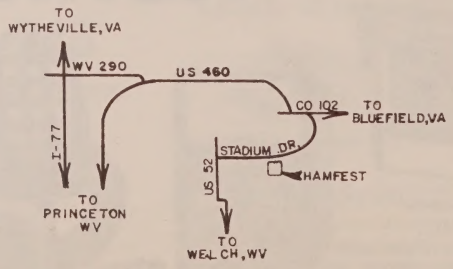
The East River Amateur Radio Club wishes to announce and invite everyone to the Annual Bluefield Hamfest on August 27, 1978. The Hamfest will be held indoor at the Bluefield City Auditorium. Our Hamfest has been growing each year and we hope you will be able to come and help make this year bigger and better than ever!

For anyone able to attend, on Saturday, August 26, the club will have a Hospitality Room at the Highlander Motel, where most of the out-of-towners will be staying. The Hospitality Room will open at 6:00 PM and close when everyone is tired. There will be punch and snacks for all that are able to come on Saturday evening.

On Sunday, August 27, the building will open at 8:00 AM. There is no admission charge, plenty of room, and plenty of seating. You won't have to worry about standing all day. We will be taking orders for chicken and fish box lunches. There are several dealers planning to attend, including Rush Electronics, Telcom, and Radio Communications. There will be a demonstration of Microprocessors and a Test Bench where you can have your prospective purchases checked for operation. The main prizes this year will be:

Ten-Tec Argonaut QRP H.F. Transceiver
Yaesu FT-227R 2 Meter Transceiver
Yaesu World Clock

There will be several small prizes to be given away throughout the day. These prizes will include items of interest to Hams and Non-Hams. We are planning activities and displays that will interest the ladies. Table space is available for Dealers Displays and Flea Market. Tables are $5.00 each. If possible, reserve your tables early!



73's es Hpe To C U at
the Hamfest!

For Advanced Registration
or
Additional Information
Contact
Bill Fisher WA8RHT
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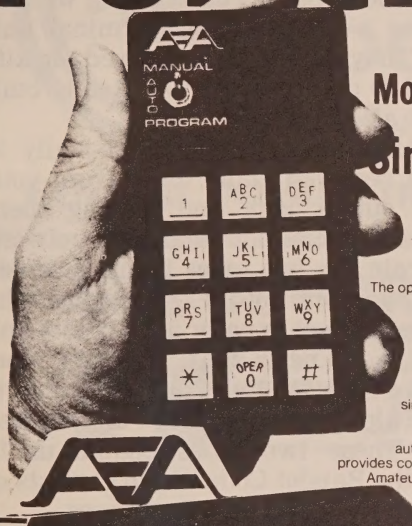
Bluefield, WV 24701

WE WILL MONITOR 3.947 Mhz AND 146.16/76 Mhz.

PUNCH UP



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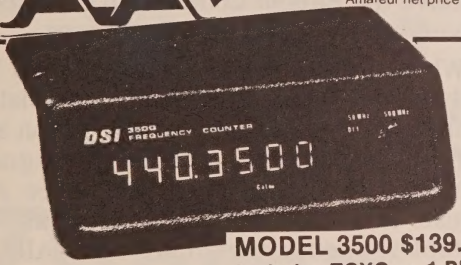
Most Called Numbers *with a* Single Key Punch!

Now you can dial up to 18 complete 7 or 8-digit phone numbers by punching only one (or two) keys on your pad. The AD-1 Auto Dialer's 10 number capacity RAM can be completely programmed from its own pad in less than a minute. The optional field - installable factory-programmed PROM adds 8 more numbers for $4.95. The AD-1 is ideal for mobile autopatches, home or business use. It features a unique MOS microprocessor which permits both tone duration and spacing to be programmed along with the numbers, adding versatility for repeater or similar control functions. Its crystal controlled tone generator assures high stability over a wide temperature range. The AD-1 is fully automatic and foolproof in operation. Coil cord provides convenient connection to your rig. Suggested Amateur net price $129.95. A PROM order card is packed with each AD-1.



MODEL 3500 $139.95
Includes TCXO ± 1 PPM

- **MADE IN USA**—Factory assembled—2 Hr. Burn-in Test & Calibration
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- 7 Large Bright—½ inch LED Readouts
- Resolution—10Hz Non-Prescaled 10[illegible] Prescaled, .1 sec Gate
- **ACCURACY** ± 1 PPM ± one count ± [illegible]PPM per six months from 65°F to 85°F
- **SENSITIVITY**—50 MvRms 150 to 250MHz 100Mv @ 450MHz
- Gate Time Light—**Automatic** Decimal Point Placement
- Automatic Leading Zero Blanking When No Input Signal is Present
- No RF Connection Required with Supplied Antenna
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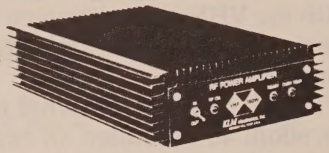
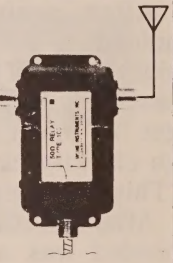
KLM

Amplifiers Antennas



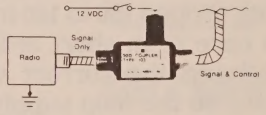
Amplifier	Freq.	Input	Output	
PA2-25B	2m FM	1-4w	25w	$ 72.95
PA4-80BL	2m FM/SSB	4w	80w	219.95
PA4-140B	2m FM	4w	140w	281.95
PA15-40BL	2m FM/SSB	5-15w	40w	129.95
PA15-80BL	2m FM/SSB	5-15w	80w	189.95
PA15-160BL	2m FM/SSB	15w	160w	289.95
PA45-160BL	2m FM/SSB	45	160w	189.95
PA4-70BC	220 FM	4w	70w	219.95
PA15-60BC	220 FM	15w	60w	189.95
PA45-120BC	220 FM	45w	120w	229.95
PA4-40CL	450 FM/SSB	4w	40w	218.95
PA15-40CL	450 FM/SSB	15w	40w	179.95
PA15-110CL	450 FM/SSB	15w	110w	305.95

ONE FEEDLINE FOR TWO OR THREE ANTENNAS



WITH
INLINE "wireless" controlled coaxial relays.

WITHOUT
multiwire control cable.



INLINE'S exclusive coaxial coupler at the radio energizes a weatherproof relay/s mounted on the tower, pole, tree, or wherever the antennas are via any length coaxial cable. Using more than one antenna lets you reach out further because you can instantly compensate for changes in propagation or signal path conditions. You can also change bands, or polarization, or phase arrays. You can eliminate a rat's nest of wires. Ideal for apartment dwellers.
INLINE relays are in constant use worldwide, in more than 100 countries, in any conceivable climate, by Amateurs, International News Services, Embassies, Cable TV, Government Agencies, Etc. where reliable communication is a must.

Type 101*	DC to 550 MHz	2500 W PEP—	$29.95
Type 103	20 to 550 MHz	1000 W PEP—	41.95
Type 105	1.5 to 180 MHz	2500 W PEP—	51.95

*(not "wireless" controlled—use 1 wire + gnd.)
Literature and application data on request.

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Completely Regulated 13.8 to 20 volts dc, variable. Separate volt and amp meters. **Dual** protection against over voltage and over current.

4 amp.	$ 59.95
8 amp.	$109.95
20 amp.	$159.95

THE COMING THING IS RITTY ON THE VHF FREQUENCIES.

-by Danny Turner, WA4YGD

Several months ago I got a little bored with the VHF gear sitting on the bench just staring back at me, and I got restless for something new.

Then it came to me, what to do about my boredom as I recalled an experience I had had with an old Model 15 teletypewriter back in my high school days.

A visit to Raymond Bishop, W4GRS of Burlington, (N.C.) my old teacher proved to be helpful as the old machine we had used in school was still at his home. Ray was glad to see someone interested enough in the teletype to get it out of the way.

After arriving at my house and unloading the TTY and blowing about eight years of dust off the thing, I started searching for some information on how to get the machine to do something besides go clackity clack everytime I turn it on. (This is called running "open")

After a little research, I found what I needed was a Loop Supply, capable of running around 100 to 160 ma DC. This was taken care of in short order. I then went about tying the correct wires from the machine to the loop supply, four wires in all.

I must admit at first I was not sure if I would ever be able to get the machine hooked up and running, since I knew very little about what I was doing, but being stubborn as I am, I got her going with the local loop.

A set of selector magnets and keyboard contacts within the machine is tied in series with a 2500 ohm resistor, to limit the current to 60 ma. and then tied in series with the loop supply. With this local loop, you can type on the keyboard and the machine will print what you type.

The next step is to take the teletype tones that come off your receiver from another station and turn them into DC pulses that will turn a transistor on and off that breaks the loop supply accordingly. This can be done by constructing what is known as a converter or terminal unit (T.U.). They can be homebrewed, or kits from $39.00 up are available. Ready built units are also available.

The purpose of the TU is basically to take the received audio tones from your speaker output jack and feeding them through a discriminator and filter network to separate the two tones being received and change them into a DC voltage. The two tones are set usually at 2125 khz and 2295 khz, a 170 hertz shift. A steady tone, called a "mark" tone at 2125 mhz is received along with a "space" tone shifted 170 hz. These two tones enable us to receive the Baudot Code which consists of seven mark and space tones.

When these tones are converted to DC pulses which turn off and on a transister, which in turn keys the loop circuit on and off, the machine selector magnets correspond to the proper sequence and cause the machine to function as the complete sequence commanded. (All this occurs in a matter of miliseconds).

What does this have to do with VHF? You would be surprised at the RTTY activity on the 2-meter and 220 mhz band. In my area of King, N.C. we do considerable simplex 2 and 220 RTTY. There is also a 220 mhz RTTY repeater in Winston-Salem which has a lot of activity.

We do lots of typing to each other on the "Green Keys". and some of the fellows have tapes of pictures they are always happy to send us, I might add some very "interesting" pictures too.

We'll write more later about our progress in Teletype.

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MODEL -AD-1 AUTO - DIALER

Stores up to ten telephone and/or access code numbers in Random Access Memory (RAM). Additional eight numbers can be stored in optional plug-in Programmable Read Only Memory (PROM). The AD-1 automatically dials any number in storage.

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- 25 kHz calibrator, standard
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EDITORIAL COMMENT *Continued from Page 1*

event obviously afraid the attendance won't pay the bills, starts looking for other sources of revenue. One of the quickest ways is to charge "show" prices for booths to the "New Equipment Dealers", big or little, it matters not.

Incidentally, one club member was heard to brag the other day that they "broke even Saturday morning" at their hamvention. If they did indeed, then someone other than attendance paid a handsome price.

Dealers are the ones who are paying the price (yes, I know I'm one of them) There seems to be some misconception that dealers make a fortune at a hamfest. But that is hogwash. Talking to many of the medium to small dealers, who incidentally are the meat and potatoes of any hamfest, they report that profits from 50% of the "booth-charging hamfests" this year have been only slightly above break-even to a loss.

I wonder how long they will continue supporting these hamfests? Only time will tell, then it will be too late.

The small struggling hamfests held in open fields, parks, etc. have the right idea, but the crowds have already attended a dozen or so and there just ain't enough time left to attend "just one more", so the little hamfests or better known as flea markets suffer.

There is a fantastic influx of dealers who have started a business this year. This is healthy to the populace who attend the hamfests, lower prices, better selection of equipment, etc. But as more dealers enter the hamfest market, each gets a smaller piece of the pie. Then add the total number of hamfests each obligates himself to attend, and many begin to wonder . . . "is it worth paying $100 for booth space, driving 400 miles, paying $50 for motel rooms, meals for 2 or 3 people, gas, etc. etc." to get a slab of pie that small.

In case you haven't figured it out, $300 in expenses requires about $3,000 in sales, baby . . . there just ain't that much at many of the events these days.

I really am not trying to throw any sour grapes at anyone. I'm just trying to pass along some thoughts that might be considered next year when it comes time to plan that hamfest; maybe they'll help everyone:

(a) do we really have enough going for us to have hamfest
(b) can we put on an event that will draw people and not have to charge fancy prices to try and recoup some of the costs.
(c) Do we really need this large an area to put on a hamfest. Attendance last year can easily give you the answer.
(d) From experience, did two days work out last year.
(e) Was everyone, including the dealers happy with our convention last year, if not why?
(f) Were all those prizes we gave away a contributing factor to our success — or did they matter at all.

If your answer to all these questions is yes, then proceed. If honestly in your mind, you think some question has a no beside it, then proceed cautiously my friends . . . Lets keep the Hamfests fun . . . and forget the "big business" . . . we don't need it in Amateur Radio.

There are still several hamfest clubs who haven't lost sight of just what a hamfest should be like . . . little expense, lots of fun, and lots of people . . . think about it, was your hamfest that way?

-Wayne C. Williams, Editor

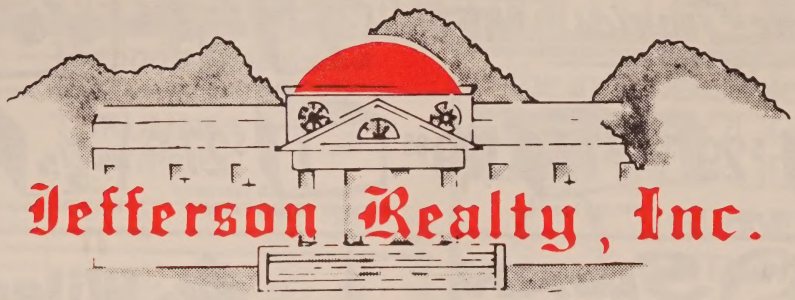
ROCK HILL HAMFEST — THE BIG LITTLE HAMFEST

The Rock Hill (S.C.) Hamfest will be held this year Sunday, October 1. The yearly event held during the crisp days of early fall is a refreshing difference from the hot summer outings. The flea market area is in an open field and under trees at the park. Dealers and new equipment will be in a covered building.

Food is usually served on the premises each year as hundreds of hams come by to swap, sell and buy.

HAMFEST SCHEDULED IN OCTOBER AT NEW BERN

There will be a hamfest in New Bern (N.C.) October 15 this year. The event, jointly sponsored by Brightleaf ARC of Greenville, the New Bern ARC, Newbern and the Onslow ARC, Inc. from Jacksonville. Publicity Chairman for the event is Robert Knapp, W4NP. He may be contacted by writing 105 Dupont Circle, Greenville, N.C. 27834.



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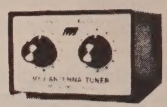

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MFJ-16010 Antenna Tuner

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CWF-2BX Super CW Filter

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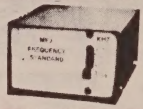
SBF-2BX SSB Filter



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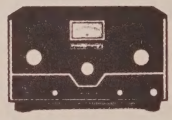
Linearity on the 1200X is excellent, efficiency is outstanding, 117/230 A.C. power supply is built in, and features like provision for external ALC give you the flexibility you need to get the most out of your rig.



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Mark II 2000-watt linear amplifier complete with separate 117/230 VAC power supply and two 3-500Z tubes $849.95

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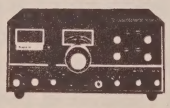

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If you're ready for 700 loud-talking watts, you're ready for the new 750CW.

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- 400 watts DC input on CW
- CW audio filter selectable 80 or 100 Hz
- CW sidetone monitor with adjustable pitch and volume control
- 80 through 10 meters, USB, LSB, CW
- Selectable 25 or 100 KHz crystal calibrator
- Standard 5.5 Mhz, 2.7 Hz bandwidth crystal filter or optional accessory 16 pole filter available with 140 Db ultimate rejection

Accessories

- VX-2 Vox
- MK-II Linear amplifier
- DD-76 Digital Dial

The 750CW is a CW man's dream come true. What's more there's a long list of accessories you can add later for increased performance

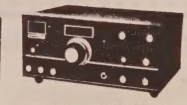
350A — $599.95

- 300 watts P.E.P. input SSB
- 200 watts DC input on CW
- 80 through 10 meters, USB, LSB, CW
- 5.5 Mhz, 2.7 KHz bandwidth crystal filter
- Oscillators are solid state and IC regulated for stability
- CW sidetone monitor with adjustable pitch and volume
- CW audio filter 80 and 100 Hz selectable
- Built in 117 VAC power supply and speaker. (220 VAC power supply available on special request)

Accessories

- VX-2 Vox
- 14A DC Converter
- 1200X linear amplifier

- Crystal Calibrator (350A only)



350D — $699.95

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25 watts	—	25A	25B	25C	25D	25E
50 watts	50H	50A	50B	50C	50D	50E
100 watts	100H	100A	100B	100C	100D	100E
250 watts	250H	250A	250B	250C	250D	250E
500 watts	500H	500A	500B	500C	500D	500E
1000 watts	1000H	1000A	1000B	1000C	1000D	1000E
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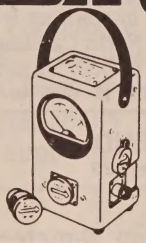

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CAN BE A CVTWVAGDCRA . . .

Continued from Page 1

command in North Carolina. Well, the past elections kept it that way, and everyone had equal votes and representation to move it if they wished but they chose not to do so.

I do see on the horizen the other states' Directors, Assistant Directors, Membership Chairmen having to increase their participation in working with the central officials. Case in point, North Carolina has 3 times the number of members of both Virginia and South Carolina combined. This is due to active participation by N.C. officials pushing for membership, in repeaters and especially Associate Memberships.

If a new state joins the CVRA, fine and dandy . . . we personally would like to see it . . . but they must be prepared to actively campaign to bring in hundreds of Associate Memberships, and at least 75% of the repeaters as members . . . this is a must for the CVRA to survive. It is very similar to a city annexing property . . . unless the taxes obtained from the new property justifies annexing . . . it should not be done.

The Northern Virginia FM Association has just recently joined the CVRA. We welcome them with open arms . . . but they now have the task SUPPORTING the CVRA. The group which owns 4 repeaters in D.C. and Northern Virginia, and is some 700 strong in membership should ACTIVELY begin campaigning to get most all of their club membership as Associate Members, after all what good is membership of the repeaters without the club members being Associate Members so they can get the Journal and see whats happening. That's our main communications link in the CVRA (and very costly too). The additional associate memberships will strengthen the CVRA coffers, raise circulation of the Journal, and give much additional information for other readers.

Tennessee, also has rumblings of joining the CVRA. They too would be an asset to the CVRA as far as this editor is concerned. I hope the Tenn. representatives and CVRA officials can come to some agreement soon. But they too must ACTIVELY PARTICIPATE with us. The time is past when a few people in one state can maintain control over several States. Tennessee like the NVFMA must provide us with STRONG leadership from their area, covering all the necessities . . . membership, coordination, news and support financially through associate members . . . it is their obligation.

Finally, we still have West Virginia and Georgia. They could also be candidates for the CVRA. I forsee in the future, a Southeastern Repeater Association comprised of: D.C., Virginia, West Virginia, North Carolina, Tennessee, South Carolina and Georgia. Lets start work today . . . each state needs good men to lead and direct his State, and merely coordinate and communicate with the central officials . . . after all, next years elections may place central control in your state . . . don't you hope the burden has spread out by then.

By the way, our headline CVTWVAGDCRA means: Carolinas-Tennessee-West Virginia-Georgia-D.C. Repeater Association . . . what do you think?

-Wayne C. Williams, Editor

VHF WEEKEND

Continued From Page 23

under their call of W4IQQ.

The group operated on 6-meters, 2-meters (FM & SSB), 220 and 432. This was their first year using 220 which proved satisfactory enough to go the band again next year.

Ken Norton, WB4HKZ reports that 6-meters proved again to be unpredictable with short openings into Mexico and the like. On Sunday morning, openings into New England helped fill a couple of quick log pages. 6-meters with the exception of those two paths did not live up to hopes in other areas.

Top "Action" for the Greer contesters proved to be 2-meter SSB, including a Florida contact. The remaining bands helped in scoring also.

Ken reported the highlight for the weekend was the breakfast cooked Sunday morning by Lester Collins, WB4PGG which included country ham, red eye gravey and grits, eggs, homemade biscuits with jelly and coffee.

The group said they would be back in the same place next year with W4IQQ.

Some other groups heard from the area included: W4CQ out of Charlotte, W4BFB, Charlotte, and W4PAR, Lexington, although they chose not to send the CVRA any information.

YOUR HOME REPEATER

From Page 16

the monthly telephone bill, cost of electricity, repairs to the equipment, and minor modifications begin to build up. Very few amateurs have experienced the costs and problems of maintaining equipment under a continuous duty cycle . . . and the experience can be traumatic.

And of course there are always improvements that need to be made in the machine . . . standby power, spare receiver and transmitter, better antennas, autopatch, and various remote control convenience circuits. Not to mention the trips to the repeater site at all hours of the day and night to make adjustments and repairs.

But where do the owners get the funds to support such investments? Well, most of it comes from a small number of Amateurs who contribute "more than their fair share." This is where you come in . . . how about selecting one of the repeaters, the one you really call "HOME" and give it your support.

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19-20 . . . . . BRISTOL, TENN.
27th . . . . . BLUEFIELD, W.VA.
September 1978
2-3 . . . . . SHELBY, N.C.
3rd . . . . . ANNUAL CVRA MEETING SAT. NITE AT SHELBY FEST
3rd . . . . . MORGANTOWN, W.VA.
16-17 . . . . . DXPO, TYSON CORNER, VA.
22-24 . . . . . SAN DIEGO, CALIF. ARRL NATIONAL CONVENTION
23-24 . . . . . NORFOLK, VA.
October 1978
1st . . . . . ROCK HILL, S.C.
7th . . . . . ASHEVILLE, N.C.
15th . . . . . NEW BERN

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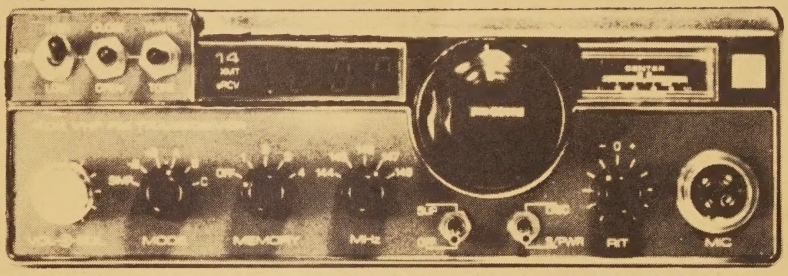

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